NAVY TRAINING SYSTEM PLAN

FOR THE

AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM

N88-NTSP-A-50-0006/P

JANUARY 2002

AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM

EXECUTIVE SUMMARY

This Navy Training System Plan provides an overview of the Air Surveillance and Precision Approach Radar Control System (ASPARCS) program and its concepts for operation, maintenance, manpower, and training. The ASPARCS program is currently in the System Development and Demonstration Phase, approaching Milestone Decision C of the Defense Acquisition System. Developmental Testing for ASPARCS will begin in fourth quarter Fiscal Year (FY) 02, and Operational Testing in second quarter FY03. The Initial Operating Capability date for the ASPARCS program is scheduled for fourth quarter FY04.

The ASPARCS system is required by the Naval Air Systems Command to replace the current AN/TSQ-131(V) Radar Command and Control Shelter, the AN/TPS-73 Airport Surveillance Radar, and the AN/TPN-22 Precision Approach Radar systems of the Marine Air Traffic Control And Landing System (MATCALS). These systems are reaching their service life limits and suffer from parts obsolescence and increased support costs. ASPARCS will provide the Marine Corps with a system that is light, highly mobile, affordable, and maintainable. It will also provide interfaces to national and international Air Traffic Control (ATC) agencies. ASPARCS will be the Marine Air Traffic Control Detachments' (MATCD) primary means of detecting, identifying, tracking, and reporting on all Air Breathing Targets (ABT). ABTs are defined as manned aircraft, cruise missiles, or Unmanned Aerial Vehicles.

The ASPARCS program is being acquired in two phases. Phase I includes all core ATC components and will rely heavily on Non-Developmental Items with modifications. Phase II will incorporate interoperability with aviation command and control agencies, while enhancing ATC functions of the Phase I ASPARCS components.

Operation and maintenance of the ASPARCS will not require any additional manpower from the current MATCD Table of Organization. Marine Corps personnel will operate and maintain ASPARCS using an organizational to depot level maintenance concept.

In FY07, ASPARCS operator and maintainer training will be added as new segments to the existing Radar, Communications, and ATC Operator pipelines. ASPARCS will be implemented in two separate evolutions, which will allow both MATCALS equipment and ASPARCS equipment to be taught during the transition. The ASPARCS training program will consist of ASPARCS initial training for operator and maintainer personnel provided by the Lockheed Martin Corporation. Follow-on training will be conducted at Department of Defense facilities.

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LIST OF ACRONYMS

ABT	Air Breathing Target
ADC	Arrival and Departure Control
AGL	Above Ground Level
AMTCS	Aviation Maintenance Training Continuum System
AOB	Average Onboard
ASPARCS	Air Surveillance and Precision Approach Radar Control System
ASR	Air Surveillance Radar
ATC	Air Traffic Control
ATIR	Annual Training Input Requirement
BIT	Built-In Test
BITE	Built-In Test Equipment
CAC2S	Common Aviation Command and Control System
CCS	Control and Communications Subsystem
CFY	Current Fiscal Year
CIN	Course Identification Number
CINCLANTFLT	Commander in Chief, Atlantic Fleet
CINCPACFLT	Commander in Chief, Pacific Fleet
CM	Corrective Maintenance
CMC	Commandant of the Marine Corps
CNET	Chief of Naval Education and Training
CNO	Chief of Naval Operations
COTS	Commercial Off-The-Shelf
CS	Communications Subsystem
CSP	Commercial Stock Point
DoD	Department of Defense
DT	Developmental Test
FAA	Federal Aviation Administration
FC	Final Control
FIT	Fleet Integration Team
FMS	Foreign Military Sales
FOC	Full Operational Capability
FY	Fiscal Year
GFE	Government Furnished Equipment

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LIST OF ACRONYMS

GOTS	Government Off-The-Shelf
GPSTOD	Global Positioning System Time-Of-Day
H&HS	Headquarters and Headquarters Squadron
HMMWV-HV	High Mobility Multipurpose Wheeled Vehicle, Heavy Variant
HQ	Headquarters
IFF	Identification Friend or Foe
IOC	Initial Operational Capability
ISEA	In-Service Engineering Activity
ISP	Integrated Support Plan
ITSS	Individual Training Standards System
LCMP	Life Cycle Maintenance Plan
MACCS	Marine Air Command and Control System
MACS	Marine Air Control Squadron
MATC	Marine Air Traffic Control
MATCALS	Marine Air Traffic Control And Landing System
MATCD	Marine Air Traffic Control Detachment
MATMEP	Maintenance Training Management and Evaluation Program
MATSG	Marine Aviation Training Support Group
MCAF	Marine Corps Air Field
MCAS	Marine Corps Air Station
MCCDC	Marine Corps Combat Development Command
MCO	Marine Corps Order
MCOTEA	Marine Corps Operational Test and Evaluation Activity
MD	Multifunction Display
MHE	Material Handling Equipment
MOS	Military Occupational Specialty
MSD	Material Support Date
NA	Not Applicable
NATTC	Naval Air Technical Training Center
NAVAIRSYSCOM	Naval Air Systems Command
NAWCAD	Naval Air Warfare Center Aircraft Division
NDI	Non-Developmental Item
NIMA	National Imagery and Mapping Agency

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LIST OF ACRONYMS

nm	Nautical Mile
NTSP	Navy Training System Plan
OJT	On-the-Job Training
OPNAV	Office of the Chief of Naval Operations
OPO	OPNAV Principal Official
OPTEVFOR	Operational Test and Evaluation Force
ORD	Operational Requirements Document
OS	Operations Subsystem
OT	Operational Test
PAR	Precision Approach Radar
PBL	Performance Based Logistics
Pd	Probability of Detection
PDA	Principal Development Agency
PFY	Previous Fiscal Year
PM	Preventive Maintenance
PMA	Program Manager, Air
PMOS	Primary Military Occupational Specialty
RFT	Ready For Training
RLST	Remote Landing Site Tower
SMOS	Secondary Military Occupational Specialty
SOO	Statement Of Objectives
SPS	System Performance Specification
SRD	Systems Requirement Document
TBD	To Be Determined
TD	Training Device
TFS	Total Force Structure
T/O	Table of Organization
TSA	Training Support Agency
TTE	Technical Training Equipment
UAV	Unmanned Aerial Vehicle
UIC	Unit Identification Code
USMC	United States Marine Corps

AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM

PREFACE

This Proposed Navy Training System Plan (NTSP) has been developed to update the Air Surveillance and Precision Approach Radar Control System (ASPARCS) Draft Navy Training System Plan, A-50-0006/D, dated May 2001. This document has been updated to comply with guidelines set forth in the Navy Training Requirements Documentation Manual, Office of the Chief of Naval Operations (OPNAV) Publication P-751-1-9-97.

This NTSP provides the latest information about the ASPARCS program, including training, manpower, delivery schedules, milestones, and points of contact. This NTSP also provides the latest ASPARCS Developmental Testing (DT) and Operational Testing (OT) information.

This NTSP incorporates updated information received from Naval Air Systems Command (NAVAIRSYSCOM) Program Manager, Air (PMA) 2134 and PMA205; Naval Air Technical Training Center Pensacola (NATTC); Marine Air Control Squadron One, Detachment Bravo; and Marine Corps Air Station Cherry Point with comments pertaining to general verbiage and schedule changes.

An ASPARCS NTSP conference was held on 14 and 15 November 2001 at St. Inigoes, Maryland. In attendance were key personnel and representatives from Headquarters, Marine Corps; NAVAIRSYSCOM PMA213; PMA205; AIR 3.4.1; Naval Air Warfare Center Aircraft Division Patuxent River; Space and Naval Warfare Systems Command; NATTC Pensacola; various Fleet users; the Lockheed Martin Corporation; and various contract support personnel. Several discussions and decisions were made including interests concerning installation of ASPARCS components at NATTC, instructor billet requirements, format and delivery of integrated training packages, schoolhouse asset operation and support, and training devices.

PART I - TECHNICAL PROGRAM DATA

A. NOMENCLATURE-TITLE-PROGRAM

1. Nomenclature-Title-Acronym. Air Surveillance and Precision Approach Radar Control System (ASPARCS)

2. Program Element. 0604504N

B. SECURITY CLASSIFICATION

1. System Characteristics ..... Unclassified
2. Capabilities ..... Unclassified
3. Functions..... Unclassified

C. MANPOWER, PERSONNEL, AND TRAINING PRINCIPALS

OPNAV Principal Official (OPO) Program Sponsor..... CNO (N785)

OPO Resource Sponsor ..... CNO (N785)

Functional Mission Sponsor ..... CNO (N785)

Marine Corps Program Sponsor..... CMC (APC-5)

Developing Agency ..... NAVAIRSYSCOM (PMA213)

Training Agency.....CNET (ETE-32)
MCCDC (C5325A)

Training Support Agency..... NAVAIRSYSCOM (PMA205)

Manpower and Personnel Mission Sponsor ..... CNO (N12)
CMC (ASM-1)

Director of Naval Training ..... CNO (N795)

Marine Corps Force Structure..... MCCDC (C53)

D. SYSTEM DESCRIPTION

1. Operational Uses. The primary mission of ASPARCS will be to satisfy the Marine Air Traffic Control Detachments' (MATCD) mission of detecting, identifying, tracking, and reporting of all Air Breathing Targets (ABT). (The definition of an ABT includes manned aircraft, Unmanned Aerial Vehicles (UAV), and Cruise Missiles). ASPARCS will provide the MATCD with a real-time display of all air activity within their assigned area of responsibility. It will be adaptable to the standard Marine Corps High Mobility Multipurpose Wheeled Vehicle, Heavy Variant (HMMWV-HV), and will be rugged enough to support a wide range of tactical operations in all types of weather and terrain conditions. Additionally, ASPARCS will provide the speed and flexibility required for enhanced Air Traffic Control (ATC) capabilities in the execution of Operational Maneuver From The Sea, Ship To Objective Maneuver, Sustained Operations Ashore, and other expeditionary operations. When deployed, the ASPARCS will possess the mobility to keep pace with supported maneuver elements.

As a secondary mission, ASPARCS will be capable of transmitting track information on targets detected within its coverage limits to air defense agencies within the Marine Air Command and Control System (MACCS). Additional ASPARCS missions will include supporting worldwide emergencies and disaster relief operations, and serving as an interim replacement for shore-based Naval ATC systems during equipment upgrades or other Service Life Extension Program (SLEP) efforts.

The Common Aviation Command and Control System (CAC2S) Mission Need Statement AAS 48, dated April 1995, validated the requirement for an ATC capability to control aircraft, including fixed wing, rotary wing, and UAV. The ASPARCS will be employed by the MATCD while assigned to Marine Air Control Squadrons (MACS). The ASPARCS will fulfill the mission of the ATC agency of the MACCS and Marine Air-Ground Task Force.

2. Foreign Military Sales. No Foreign Military Sales (FMS) of the ASPARCS systems are planned at this time.

E. DEVELOPMENTAL TEST AND OPERATIONAL TEST. Naval Air Warfare Center Aircraft Division (NAWCAD), Patuxent River, Maryland, will perform the ASPARCS DT, primarily at the Landing Systems Test Facility. DT is scheduled to begin in fourth quarter Fiscal Year (FY) 02. The Marine Corps Operational Test and Evaluation Activity will conduct the OT, primarily at Bogue Field, North Carolina, beginning in second quarter FY03. An ASPARCS Test Evaluation Master Plan will be developed prior to DT and OT. These measures will ensure that the system will meet all environmental, shock, vibration, and performance thresholds as defined in the ASPARCS Systems Requirement Document (SRD) and System Performance Specification (SPS). The contractor is responsible for the development of the first article and production tests, plans, and procedures and will also conduct or direct testing necessary to establish the reliability and maintainability levels for the system. In lieu of actual first article testing, test data from the Non-Developmental Item (NDI) subsystems previously tested by Department of Defense (DoD) agencies will be accepted.

F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED. ASPARCS will replace the AN/TSQ-131(V) Radar Command and Control Shelter, the AN/TPS-73 Air Surveillance Radar (ASR), and the AN/TPN-22 Precision Approach Radar (PAR) Marine Air Traffic Control And Landing System (MATCALS) systems, which are reaching their service life limits.

G. DESCRIPTION OF NEW DEVELOPMENT

1. Functional Description. Advanced aircraft technologies and the need for lightweight, highly mobile radar, and related command and control nodes have driven the requirement for significant upgrades to the current ATC system. The goal of the ASPARCS is to achieve greater mobility and transportability to support modern warfighting by enhancing the MATCD's capability to effectively detect, identify, track, and report on all ABTs. The ASPARCS will principally facilitate the safe and expeditious flow of air traffic during joint or combined operations.

The highly mobile ASPARCS will consist of four subsystems, the ASR, PAR, Operations Subsystem (OS), and Communications Subsystem (CS). All four subsystems will be mounted on and be capable of operating from HMMWV-HVs. In addition, each of the subsystems will be capable of removal from the HMMWV-HV without the use of Material Handling Equipment (MHE), and capable of remote operation while separated from the HMMWV-HV. The ASR and PAR will provide maintenance personnel with a detailed diagnostic tool for situations wherein the ASR and PAR are not physically interfaced to the OS. This is accomplished by using a Personal Computer Maintenance Port for the purpose of initiating and observing the results of ASR and PAR, Built-In Test (BIT) or Built-In Test Equipment (BITE), and diagnostic tests. Both the ASR and PAR will operate in a frequency range currently approved for military ATC radar systems.

a. Air Surveillance Radar. The ASPARCS ASR subsystem will provide a digital indication display system with interactive controls and devices required to perform ABT surveillance, arrival, departure, and en route control functions. It will include radar and Identification Friend or Foe (IFF) plot and track symbols, weather, flight data, flight clearance, and relevant map information. The ASR will also provide controls, alerts, and advisories, including Minimum Safe Altitude Warning, conflicts, and handoffs, while being augmented with National Imagery and Mapping Agency (NIMA) map products. The ASPARCS ASR subsystem will also incorporate anti-radiation missile protection, plus selectable and automatic Electronic Protection features. The ASPARCS ASR SRD and SPS threshold and objectives include:

ASR DETECTION	THRESHOLD	OBJECTIVE
Detecting ABTs at Radial Velocities	40 knots to Mach 1	0 knots to Mach 2
Remote from the OS and PAR	3000 meters	5000 meters

ASR DETECTION	THRESHOLD	OBJECTIVE
Radar Plot	Two-dimensional (azimuth and range) radar information	Three-dimensional (azimuth, range, and altitude) radar information
Coverage Volume for Detecting ABTs	1 to 30 degrees elevation within altitudes 100 to 20,000 feet Above Ground Level (AGL), 360 degrees azimuth, and 0.5 to 45 nautical miles (nm)	1 to 30 degrees elevation within altitudes 100 to 20,000 feet AGL, 360 degrees azimuth, and 0.5 to 60 nm
IFF Coverage	IFF returns from 0.5 to 60 nm, 1 to 30 degrees elevation, within altitudes of 100 to 40,00 feet	IFF returns from 0.5 to 120 nm, 1 to 30 degrees elevation, within altitudes of 100 to 60,00 feet

b. Precision Approach Radar. The ASPARCS PAR subsystem will provide precision approach capability with Federal Aviation Administration (FAA) conformance. The PAR will provide an all-digital display and automatic three-dimensional information (azimuth, elevation, and range) on all ABTs within the prescribed scan area. It will provide the capability of servicing up to three intersecting runways (only one direction at a time). The ASPARCS PAR SRD and SPS threshold and objectives include:

PAR DETECTION	THRESHOLD	OBJECTIVE
Detecting ABTs Speeds	40 to 250 knots with a single scan Probability of Detection (Pd) of 0.90, within the specified coverage volume	40 to 250 knots with a single scan Pd of 0.95, within the specified coverage volume
ABTs Range Accuracy	Two percent ±60 feet, whichever is greater for both search and track	One percent ±30 feet, whichever is greater for track only
ABTs Elevation Accuracy	1.0 square meter target of no more than 0.23 degrees for search and track, a total error at touch down point less than 20 feet for search and track, with a minimum update rate of 1 Hertz	0.12 degrees for track only, with a total error at touch down point less than 10 feet for track only, with a minimum update rate of 5 Hertz (track only)
Track Capacity on Final Approach	10 nm for four ABTs, approaches 200 feet above runway threshold, and 0.5 nm from the touch down point	15 nm for six ABTs, approaches 100 feet above runway threshold, and 0.25 nm from the touch down point

PAR DETECTION	THRESHOLD	OBJECTIVE
Remote from the OS and ASR	3000 meters	5000 meters
PAR Coverage Volume	Detecting ABTs within a sector defined as -1 to +7 degrees in elevation, ±7.5 degrees azimuth, and 750 feet to 15 nm in range	Detecting ABTs within a sector defined as -1 to +13 degrees in elevation, ±20 degrees azimuth, and 750 feet to 15 nm in range

c. Operations Subsystem. The ASPARCS OS will employ a high-capacity digital data link in order to forward specified targets and track data. This will include a target tagging feature and symbology configuration that is compatible with higher and adjacent air command and control agencies. The OS subsystem will provide an automated mapping capability that inputs and outputs NIMA standard digital products. Mapping formats of NIMA maps will be included in the Interface Standard for Vector Product Format in order to support Joint Operations and to be interoperable among all DoD Command Control Communications Computers and Intelligence agencies. An automated load capability will be available to use these databases with minimum workload. The control software will provide multiple display modes to accommodate the various aspects of ATC as well as simulation, training, and maintenance.

d. Communications Subsystem. The ASPARCS CS will be interoperable with the AN/TSQ-216 Remote Landing Site Tower (RLST), AN/TSQ-120B ATC Central (Expeditionary Airfield Tower), and CAC2S. The CS will provide the voice communications equipment necessary to perform safe ATC as well as the data link equipment to communicate with all appropriate military and civilian agencies. The CS infrastructure will support OS expansion from four Multifunction Display (MD) operator positions and one supervisor position, to eight MD operator and two supervisor positions.

2. Physical Description. The ASPARCS program is currently in the System Development and Demonstration Phase of the acquisition process; consequently, specific ASPARCS components have not been identified. The current NAWCAD combined design calls for a single HMMWV-HV with a mounted rigid shelter and a Deployable Rapid Assembly Shelter serviced by a trailer with Generator Set and Environmental Control Unit. The majority of the CS equipment will be mounted within the shelter and the majority of the OS equipment will be mounted in transit cases. During normal operation, the transit-cased equipment will be set up and operated within the tent. During transport, the transit cases will be stowed within the shelter or on the OS and CS trailer. The design of the CS requires a Global Positioning System Time-Of-Day (GPSTOD) distribution subsystem for the radios and audio recorder. The OS and CS design will also include a GPSTOD distribution capability inside the OS tent. Further information on physical description or design modifications will be included in updates to this NTSP as the design develops.

3. Development Introduction. The ASPARCS will be acquired in two phases. Phase I includes all core ATC components and will consist of NDI with modifications. Phase II will incorporate interoperability with aviation command and control agencies and enhanced ATC functions to the Phase I ASPARCS. The ASPARCS will be comprised of Government Off-The-Shelf (GOTS), Commercial Off-The-Shelf (COTS), Government Furnished Equipment (GFE) and NDI equipment and software to the maximum extent. The ASPARCS program will also exploit the opportunities offered by digital communications, sensors netting, micro-miniaturization, and other technologies that are available via GOTS and COTS sources.

4. Significant Interfaces. ASPARCS and its related equipment uses fiber optics, standard telephone lines, electrical wiring, radio networks, and remote control signals to interface with its various components, aircraft, and other MACCS agencies.

The ASPARCS will be adaptable to the standard Marine Corps HMMWV-HV. A maximum of three HMMWV-HV (M1097A2) GFE vehicles, with three trailers, will be capable of containing the ASPARCS. One HMMWV-HV and one trailer will be dedicated to the sole use of the OS and CS. The remaining two HMMWV-HV and two trailers will be capable of containing the PAR and ASR and all of its associated equipment. The Government will procure the OS and CS trailer, and the contractor, if required, will procure the ASR and PAR trailers. The ASPARCS, while mounted on the HMMWV-HV and trailers, will be capable of loading without the use of MHE, shoring, or external power. It will be able to be shipped via military C-130, C-141, C-17, and C-5 transport aircraft. The ASPARCS will be capable of reconfiguration from the transport mode to the basic operational mode within 90 minutes.

The ASPARCS program will interface and support the National standards for interoperability with FAA and International Civil Aviation Organization ATC systems within the areas of National Airspace Systems. These ASPARCS interfaces will allow for target conflict alert and resolution, automated target hand-off and hand-over, weather display, aircraft flight plans, and airspace control functions for military and civilian aircraft. The ASPARCS will also interface with the AN/TSQ-216 RLST.

5. New Features, Configurations, or Material. The ASPARCS program will develop and integrate emerging technologies in order to provide more lightweight, highly mobile radar and related command and control nodes. It will offer a significantly reduced footprint compared to the MATCALS equipment being replaced. The ASPARCS design will provide for the following deployment configuration options:

- ***Option 1*** - Entire ASPARCS including the ASR, PAR, OS, and CS
- ***Option 2*** - ASR, OS, and CS (PAR not deployed)
- ***Option 3*** - PAR, OS, and CS (ASR not deployed)
- ***Option 4*** - OS and CS (ASR and PAR not deployed)
- ***Option 5*** - ASR, plus a subset of the OS and CS and the PAR, plus a subset of the OS and CS deployed simultaneous, but separately

There is no contractor requirement to provide transport options other than for Options 1 through 4. However, the equipment necessary to perform Options 1 through 4 will be provided, and the design will fully support Option 5.

H. CONCEPTS

1. Operational Concept. The ASPARCS will be operated by MATCD personnel to provide ATC capabilities throughout an Amphibious Operational Area without regard to the effects of weather within the parameters defined in the Operational Requirements Document (ORD) and the SRD. Two Marine Corps personnel are required to set up each subsystem to the basic operational mode level and to the full operational mode. The following Marine Corps personnel and Military Occupational Specialty (MOS) will operate the ASPARCS in the execution of the ATC missions:

POSITION	**MOS**
ATC Officers	7220
ATC	7257
Senior ATC	7291
ATC Tower	72XX/7252
ATC Radar	72XX/7253
Radar Approach Controller	72XX/7254

2. Maintenance Concept. The ASPARCS maintenance concept, less the HMMWV-HV transport vehicles, will be consistent with that for existing MATCD systems and equipment. Maintenance of the ASPARCS components will be accomplished using an organizational to depot level maintenance concept. ASPARCS maintenance will be defined in Office of the Chief of Naval Operations Instruction (OPNAVINST) 4790.XX, which is currently in development. The ASPARCS maintenance intention is to minimize the requirement for organizational level corrective maintenance to allow Marine Corps maintainers to service and sustain the ASPARCS as far forward in the battle area as possible, without having to rely on depot or contractor support. This will be accomplished using common tools and general purpose test equipment to the maximum extent. The following Marine Corps personnel will provide MATCALS ATC maintenance supervision, coordination, and administration:

POSITION	**MOS**
ATC Maintenance Officer	5950
ATC Maintenance Chief	5959

a. Organizational. Organizational level maintenance skill levels required to maintain ASPARCS will not exceed the current MOS skill levels required to support the MATCALS equipment to be replaced. The MATCD performs all levels of organizational maintenance, which includes functions normally accomplished by an intermediate maintenance activity. The following Marine Corps ATC personnel will perform ASPARCS organizational level maintenance:

POSITION	**MOS**
ATC Radar Technician	5953
ATC Communications Technician	5954

Non-ATC Marine Corps personnel with MOSs 1142, 1161, 1169, and 1341 assigned to the MATCD will provide limited ASPARCS maintenance support. Marine Corps personnel with MOS 6492 will provide for calibration of ASPARCS components at the supporting Intermediate Maintenance Activity.

(1) Preventive Maintenance. Marine Corps personnel with MOSs 5953, 5954, 1142, 1161, or 1341 will perform Preventive Maintenance (PM) on ASPARCS equipment. PM will be performed at the organizational level and will consist of adjustments, alignments, inspection, lubrication, cleaning, and other tasks required to ensure continued operation of the ASPARCS. The ASPARCS will be required to run 120 continuous hours prior to PM. The PM objective will be to perform no more than two hours of PM per week.

(2) Corrective Maintenance. Marine Corps personnel with MOSs 5953, 5954, 1142, 1161, and 1341 will perform Corrective Maintenance (CM) on ASPARCS equipment. CM will consist of BIT fault isolation, removal and replacement of failed modules and components, and system functional testing. BIT and BITE will be capable of detecting faults, while isolating 95 percent of all electrical and electronic faults to no more than three ASPARCS subassemblies. CM will consist of diagnosing and isolating a malfunction to the faulty lowest replaceable unit, removing and replacing subassemblies and piece parts, performance of subassembly and subsystem adjustments and alignments as necessary, and verification that the malfunction has been corrected.

b. Intermediate. Not Applicable (NA)

c. Depot. The contractor will provide a Performance Based Logistics (PBL) program and function as the Government's commercial stocking point for material applicable to ASPARCS program not currently supported by the Navy supply system. The PBL program is a commercial depot concept that is intended to be the supply support of the ASPARCS program. The original equipment manufacturer or an authorized repair station will perform depot level maintenance. Depot level maintenance is performed on material requiring overhaul, restoration, manufacture of parts and modification, or complete rebuild of parts for assemblies, subassemblies, and end items that are beyond the repair capability of the organizational level.

The contractor will be responsible for the repair or replacement of all failed Replaceable Units that are provisioned and will be requisitioned by the Fleet.

For ATC Detachments, support of software maintenance corrections, reproduction, and enhancements is also considered a depot level maintenance function. The In-Service Engineering Agency (ISEA) for ASPARCS is NAWCAD Patuxent River, who will perform depot level maintenance for software as well as depot level maintenance for the shelter. The ISEA for MATCALS is Space and Naval Warfare Systems Center, San Diego, California, who performs depot level maintenance on MATCALS hardware and equipment.

d. Interim Maintenance. NA

e. Life Cycle Maintenance Plan. The Life Cycle Maintenance Plan (LCMP) for the ASPARCS and associated equipment will use a five-year management concept. The LCMP will include, but not be limited to, Equipment Installation and Restoration Plans, Technical Manual Update Plans, Onboard Training Plans, Support Equipment Plans, Software Enhancement Plans, Procurement of GFE Plans, and Maintainability and Improvement Plans. The ASPARCS installed at Naval Air Technical Training Center (NATTC), Pensacola, Florida, will be considered non-deployable and may be modified for instructional purposes.

3. Manning Concept. Operation and maintenance of the ASPARCS will not require any additional manpower from the levels currently assigned in the MATCD Table of Organization (T/O). Air Traffic Controllers holding MOS 72XX will man and use the ASPARCS in the execution of the ATC mission. ATC maintenance supervision, coordination, and administration is provided by the ATC Maintenance Officer (MOS 5950) and the ATC Maintenance Chief (MOS 5959). ATC Radar Technicians (MOS 5953) and ATC Communications Technicians (MOS 5954) will maintain the ASPARCS at the organizational level. Non-ATC Marine Corps personnel with MOSs 1142, 1161, 1169, and 1341 assigned to the MATCD will provide limited ASPARCS maintenance support. Marine Corps personnel with MOS 6492 will provide for calibration of ASPARCS components at the supporting Intermediate Maintenance Activity.

a. Estimated Maintenance Man-Hours per Operating Hour. Requirements for the ASPARCS components exclusive of the HMMWV-HV transport vehicles are based on a mission duration of 24 hours. Assuming the ASPARCS SRD and SPS thresholds are attained, the system will not generate a need for additional maintenance personnel. The ASPARCS technical parameter threshold values derived from the SRD for system reliability, availability, and repair time are as follows:

PARAMETER	DEFINITION	THRESHOLD	OBJECTIVE
System Operational Availability	Operational Availability, exclusive of administrative and logistic downtime	0.95	0.98

PARAMETER	DEFINITION	THRESHOLD	OBJECTIVE
System Reliability	Mean Time Between Operational Mission Failures	720 hours	1440 hours
System Availability	Uptime / (Uptime + Downtime) (percent of uptime usage)	95%	98%
Operational Mission System Maintainability	Mean Corrective Maintenance Time for Operational Mission Failures	25 minutes	15 minutes

b. Proposed Utilization. The ASPARCS proposed utilization is a period of 120 hours of continued operation without maintenance adjustments or alignments. No planned maintenance will be required during this period.

c. Recommended Qualitative and Quantitative Manpower Requirements. Qualitative and quantitative manpower requirements for ASPARCS were estimated using current MATCAL manpower data from Naval Air Systems Command (NAVAIRSYSCOM) (AIR 3.4.1), using the Table of Manpower Requirements, Total Force Structure (TFS), October 2000.

4. Training Concept. The MATCALS formal training courses established at NATTC Pensacola will transition to ASPARCS courses and equipment, as applicable. ASPARCS operator and maintainer training will specifically affect the MATCALS AN/TSQ-131(V) Control and Communications Subsystem (CCS), AN/TPS-73 ASR, and the AN/TPN-22 PAR systems and associated equipment courses. In FY07, ASPARCS operator and maintainer training will be added as new segments to the existing Radar, Communications, and ATC Operator pipelines. ASPARCS will be implemented in two separate evolutions, which will allow both MATCALS equipment and ASPARCS equipment to be taught during the transition.

Personnel selected by Headquarters, Marine Corps for MOS 72XX Air Traffic Controllers and MOS 59XX Marine Air Traffic Control (MATC) maintenance personnel will be trained in these courses to operate and maintain ASPARCS and its associated equipment.

Personnel from the Marine Forces Reserve Air Traffic Control Detachments are provided a limited number of student billets in both the controller and maintenance courses.

a. Initial Training. The contractor will establish a training program and provide operational and maintenance training prior to first article delivery and prior to the delivery of the first production unit. ASPARCS initial training will be conducted at NAWCAD Patuxent River (Webster Field) in second quarter FY02 and for instructor personnel at NATTC Pensacola in FY04. Initial training will ensure the transfer of required knowledge and skills to ATC operators, maintainers, instructors, Fleet Integration Team (FIT) members, and DT and OT personnel.

Title	**ASPARCS Initial Operator Training**
Description	This course will provide initial ASPARCS training for FIT, DT, OT, instructor, and cadre operator personnel, including: ° ASPARCS Operation ° ASPARCS Employment ° ASPARCS Capabilities ° Terminal Instrument Approach Procedures Upon completion the student will be able to participate in DT and OT, instruct, or perform as a member of the FIT.
Location	NAWCAD Patuxent River
Length	To Be Determined (TBD)
RFT date	FY02
TTE/TD	TBD
Prerequisites	° MOS 72XX ° MOS 595X

Title	**ASPARCS Initial Maintainer Training**
Description	This course provides initial ASPARCS training for DT, OT, FIT, instructors, and cadre maintenance personnel, including: ° ASPARCS System and Component Function ° ASPARCS System and Component Troubleshooting ° ASPARCS System and Component Repair Upon completion the student will be able to participate in DT and OT, instruct, or perform as a member of the FIT.
Location	NAWCAD Patuxent River, Maryland
Length	TBD
RFT date	FY02
TTE/TD	TBD
Prerequisites	° MOS 595X

b. Follow-on Training

(1) Air Traffic Controller Training. MATC operator training uses a building block approach through formal training and On-the-Job Training (OJT), as established

within the Aviation Training and Readiness Manual, Marine Corps Order (MCO) 3500.19B. Officer and enlisted trainees receive 16 weeks of instruction in *C-222-2010, Air Traffic Controller A1*, conducted at NATTC Pensacola. The trainees receive basic skills and knowledge required to perform routine duties in the control and handling of aircraft in a tower or radar environment.

Upon successful completion of *C-222-2010, Air Traffic Controller A1*, Basic Air Traffic Controller Trainees (MOS 7251) receive instruction on the operation of MATCALS equipment (and ASPARCS equipment in the future). Marine Corps Controllers attend this course in lieu of the Navy flight planning familiarization course at the end of the Air Traffic Controller Course. Course *C-222-2021, MATCALS Operator (Basic)* is five days in length and provides MATCD personnel with entry-level knowledge and skills needed to operate the MATCALS equipment. This knowledge will enable them to become familiar with MATCALS equipment and to perform basic Marine Air Traffic Control functions in a tactical environment.

Trainees are then assigned to an ATC Facility or a MACS for Reservists assigned to the 4th Marine Aircraft Wing. At their assigned duty station, enlisted personnel receive further training through OJT on Radar Final Control and Radar Flight Data or Ground Control and Tower Flight Data. Once qualified, trainees are then awarded their primary MOS 7257, Air Traffic Controller. Additional training through OJT is then required to become qualified for MOS 7252, Air Traffic Controller-Tower, and MOS 7253, Air Traffic Controller-Radar. Selected Radar Air Traffic Controllers return to NATTC Pensacola for course *C-222-2022, Advanced Radar ATC*. This phase of training provides students with the skills and knowledge to perform as a basic level Radar Approach Controller at all operating positions in a Radar Approach Control Facility and become qualified for MOS 7254. Once qualified through OJT on Radar Final Control and Ground Control, Marine Corps officers are awarded MOS 7220, ATC Officer.

Additional advanced training for senior MATCD personnel is available in *C-2G-2018, MATCALS Advanced Operator Course*, which provides comprehensive training on the deployment and operation of MATCALS. Students receive instruction on the operation, capabilities, and limitations of the MATCALS. Students are also instructed on developing and designing United States Standard Terminal Instrument Procedures. Students will perform tasks at an ATC Chief level, in an expeditionary environment, during tactical conditions. *C-2G-2018, MATCALS Advanced Operator Course* will transition to ASPARCS equipment. The following courses have been established specifically for MATCALS operator training. Beginning in FY07, ASPARCS components training will replace the AN/TPS-73, AN/TPN-22, and AN/TSQ-131 training.

Title	**MATCALS Advanced Operator Course**
CIN	C-2G-2018
Model Manager ..	NATTC Pensacola
Description	This course provides senior MATCD personnel with comprehensive training on MATCALS deployment and operation, including: ° MATCALS Operation ° MATCALS Employment ° MATCALS Capabilities ° Terminal Instrument Approach Procedures Upon completion, the student will be able to perform tasks in an expeditionary environment during tactical conditions.
Location	Marine Aviation Training Support Group (MATSG) Pensacola
Length	26 days
RFT date	Currently available (ASPARCS implementation in FY07)
Skill identifier	None
TTE/TD.....	° Various MATCALS subsystems and equipment ° Various ASPARCS subsystems and equipment
Prerequisite.....	° C-222-2021, MATCALS Operator ° E-5 and above

Title	**MATCALS Operator**
CIN	C-222-2021
Model Manager ..	NATTC Pensacola
Description	This course provides training to MATCD personnel with entry level knowledge and skills needed to operate the MATCALS equipment, including: ° MATCALS and Subsystems Familiarization ° MATCALS and Subsystems Operation Upon completion, the student will be able to perform basic MATC functions in a tactical environment.
Location	MATSG Pensacola
Length	5 days
RFT date	Currently available (ASPARCS implementation in FY07)

Skill identifier	MOS 7251
TTE/TD.....	° Various MATCALS subsystems and equipment ° Various ASPARCS subsystems and equipment
Prerequisite.....	C-222-2010, Air Traffic Controller Class A1

(2) Maintenance Training. MATC maintenance training is conducted at NATTC Pensacola. Students must complete the following prerequisite training prior to attending the MATC maintenance courses: *C-100-2020, Avionics Common Core Class A1*, and *C-100-2017, Avionics Technician I Level*. After successful completion of these courses, trainees attend one of the two technician pipelines: *C-103-2080, MATC Radar Technician Pipeline*, or *C-103-2090, MATC Communications Technician Pipeline*. Additionally, there is a supervisor and manager pipeline, *C-103-2110, MATCALS Maintenance Management and System Analysis Pipeline*. Marines may return to NATTC Pensacola to receive initial or refresher training in a segment of the pipeline they had not previously attended, providing sufficient student seats are available. The following courses have been established specifically for MATCALS maintenance training and will include ASPARCS maintenance training beginning in FY07.

Title	**MATCALS Maintenance Management and System Analysis Pipeline**
CIN	C-103-2110
Model Manager ..	NATTC Pensacola
Description	This pipeline provides career MATCD Technicians, Maintenance Officers, ATC Officers, and Maintenance Chiefs with advanced technical training to improve their skills and abilities in the performance of maintenance management, maintenance training, and supervision of an expeditionary MATCD. This pipeline consists of two courses including: ° C-103-2111, MATCALS Maintenance Management (24 days) ° C-103-2112, MATCALS System Analysis (15 days) Upon completion, the student will be able to perform maintenance management in an MACS without supervision.
Location	MATSG Pensacola
Length	39 days
RFT date	Currently available (ASPARCS implementation in FY07)
Skill identifier	None
TTE/TD	NA

Prerequisite.....	° MOS 5950, 5953, 5954, or 5959 ° Paygrades E-6 through E-8, or W-1 or W-2 or ° MOS 7220 ° Paygrades O-1 through O-3

Title	**MATC Radar Technician Pipeline**
CIN	C-103-2080
Model Manager ..	NATTC Pensacola
Description	This pipeline provides general knowledge and skills to perform preventive and corrective maintenance on the MATC radar equipment. This pipeline consists of the following five courses: ° C-103-2026, Miniature Component Repair (5 days) ° C-103-2072, MATC Technician Common Core Course (19 days) ° C-103-2081, AN/TPN-22 Radar Maintenance (113 days) ° C-103-2084, AN/TPS-73 Radar Maintenance (92 days) ° C-103-2083, AN/UYQ-34 Processor Display Set Maintenance (12 days) Upon completion, the student will be able to perform as a MATCD Radar Technician in an MACS under supervision.
Location	MATSG Pensacola
Length	247 days (estimated)
RFT date	Currently available (ASPARCS implementation in FY07)
Skill identifier	MOS 5953
TTE/TD	Various MATCALS subsystems and equipment
Prerequisite.....	° C-100-2017, Avionics Technician I Level ° C-100-2020, Avionics Common Core Class A1

Title	**MATC Communications Technician Pipeline**
CIN	C-103-2090
Model Manager ..	NATTC Pensacola
Description	This pipeline provides general knowledge and skills to perform preventive and corrective maintenance on the MATC communications equipment. This pipeline consists of the following six courses: ° C-103-2026, Miniature Component Repair (5 days) ° C-103-2072, MATC Technician Common Core Course (19 days) ° C-103-2091, MATCALS Radio Maintenance Course (50 days) ° C-103-2092, AN/TSQ-120 Maintenance (26 days) ° C-103-2093, AN/TSQ-131 Maintenance (26 days) ° C-103-2094, AN/TSQ-216 Remote Landing Site Tower Maintenance (38 days) Upon completion, the student will be able to perform as a MATCD Communications Technician in an MACS under supervision.
Location	MATSG Pensacola
Length	172 days (estimated)
RFT date	Currently available (ASPARCS implementation in FY07)
Skill identifier	MOS 5954
TTE/TD	Various MATCALS subsystems and equipment
Prerequisite.....	° C-100-2017, Avionics Technician I Level ° C-100-2020, Avionics Common Core Class A1

c. Student Profiles

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
MOS 7220, 725X	° C-222-2010, Air Traffic Controller Class A1
MOS 7254	° C-222-2010, Air Traffic Controller Class A1 ° C-222-2022, Advanced Radar Air Traffic Control
MOS 595X	° C-100-2020, Avionics Common Core Class A1 ° C-100-2017, Avionics Technician I Level

d. Training Pipelines. The following existing MATCALS courses and pipelines will be modified to include ASPARCS.

Title	**MATC Radar Technician Pipeline**
CIN	C-103-2080
Model Manager ..	NATTC Pensacola
Description	This pipeline provides general knowledge and skills to perform preventive and corrective maintenance on the MATC radar equipment. This pipeline will consist of the following four courses: ° C-103-2026, Miniature Component Repair (5 days) ° C-103-2072, MATC Technician Common Core Course (19 days) ° C-103-20XX, ASPARCS PAR Maintenance (TBD) ° C-103-20XX, ASPARCS ASR Maintenance (TBD) Upon completion, the student will be able to perform as a MATCD Radar Technician in an MACS under supervision.
Location	MATSG Pensacola
Length	TBD
RFT date	FY07
Skill identifier	MOS 5953
TTE/TD	° Various MATCALS subsystems and equipment ° Various ASPARCS subsystems and equipment
Prerequisite.....	° C-100-2017, Avionics Technician I Level ° C-100-2020, Avionics Common Core Class A1

Title	**MATC Communications Technician Pipeline**
CIN	C-103-2090
Model Manager ..	NATTC Pensacola
Description	This pipeline provides general knowledge and skills to perform preventive and corrective maintenance on the MATC communications equipment. This pipeline will consist of the following six courses: ° C-103-2026, Miniature Component Repair (5 days) ° C-103-2072, MATC Technician Common Core Course (19 days) ° C-103-2091, MATCALS Radio Maintenance Course (50 days) ° C-103-2092, AN/TSQ-120 Maintenance (26 days) ° C-103-20XX, ASPARCS OS/CS Maintenance Course (TBD) ° C-103-2094, AN/TSQ-216 Remote Landing Site Tower Maintenance (38 days) Upon completion, the student will be able to perform as a MATCD Communications Technician in an MACS under supervision.
Location	MATSG Pensacola
Length	TBD
RFT date	FY07
Skill identifier	MOS 5954
TTE/TD	° Various MATCALS subsystems and equipment ° Various ASPARCS subsystems and equipment
Prerequisite.....	° C-100-2017, Avionics Technician I Level ° C-100-2020, Avionics Common Core Class A1

I. ONBOARD (IN-SERVICE) TRAINING

1. Proficiency or Other Training Organic to the New Development

a. MACS Onboard Training. Onboard Training at the MACS consists of controller qualification and proficiency training and maintenance technical training programs. These systematic training programs are conducted by senior squadron personnel to ensure a high state of operational readiness of the squadron. This is accomplished by maintaining and improving the efficiency and technical expertise of MACS controllers and maintenance personnel within their MOSs. This training consists of classroom instruction and “hands-on” practical application with the supervision of qualified personnel. In addition, individual OJT can

be accomplished with the use of audio-visual aids, technical manuals, and Planned Maintenance System documentation.

(1) Air Traffic Controllers. The existing radar equipment pipeline contains a Training Mode for Air Traffic Controllers that provides scenarios closely resembling those of the Arrival and Departure Control (ADC) and Final Control (FC) displays. Instructor sub-modes provide the capability to generate simulated radar targets and to control them so that their behavior can be made to resemble a live radar target. The trainee sub-modes provide the same display and entry capabilities as the corresponding operator modes (ADC or FC) and allows the controller to exercise those capabilities on the simulated targets. This training should be transitioned as relevant to ASPARCS equipment.

(2) In-the-Field Controller. An annual In-the-Field Controller Training Program is presented by ISEA at selected MATCD sites. This course provides familiarization training on the MATCALS to personnel who are new to the field or who have been stationed away from the MATCD. ASPARCS will be incorporated into the MATCALS program.

(3) Marine Air Traffic Controller Maintenance. The ISEA is responsible for developing and providing Training Device (TD) and Technical Training Equipment (TTE) for maintenance and operator training on MATCALS systems and equipment ISEA coordinates with NATTC Pensacola and the MACS to determine the requirements for OJT on MATC systems and equipment. ASPARCS will be incorporated into the MATCALS program.

(4) On-Site Maintenance. The ISEA for MATCALS systems and equipment will provide on-site maintenance instruction to MATCD personnel, if required.

(5) Annual Training Schedule. The quarterly MATC newsletter, published by Space and Naval Warfare Systems Center, provides the annual training schedule for MATC maintenance and seat availability for Fleet Marine Force refresher training, as well as initial training for new systems. ASPARCS will be incorporated into the MATCALS program.

b. Aviation Maintenance Training Continuum System. ASPARCS maintenance personnel will use the Aviation Maintenance Training Continuum System (AMTCS). ASPARCS operator personnel will use the MATC operator building block approach through formal training and OJT, as established within the Aviation Training and Readiness Manual, MCO 3500.19B.

AMTCS will provide career path training to a Sailor or Marine from their initial service entry to the end of their military career. AMTCS concepts will provide an integrated system that will satisfy the training and administrative requirements of both the individual and the organization. The benefits will be manifested in the increased effectiveness of the technicians and the increased efficiencies of the management of the training business process. Where appropriate, capitalizing on technological advances and integrating systems and processes where appropriate, the right amount of training can be provided at the right time, thus meeting the Chief of Naval Operations' (CNO) mandated "just-in-time" training approach.

Technology investments enable the development of several state-of-the-art training and administrative tools: Interactive Multimedia Instruction for the technicians in the Fleet in the form of Interactive Courseware with Computer Managed Instruction and Computer Aided Instruction for the schoolhouse.

Included in the AMTCS development effort is the Aviation Maintenance Training Continuum System-Software Module which provides testing [Test and Evaluation], recording [Electronic Certification Qualification Records], and a Feedback system. The core functionality of these AMTCS tools are based and designed around the actual maintenance-related tasks the technicians perform, and the tasks are stored and maintained in a Master Task List data bank. These tools are procured and fielded with appropriate COTS hardware and software, i.e., Fleet Training Devices - Laptops, PCs, Electronic Classrooms, Learning Resource Centers, operating software, and network software and hardware.

Upon receipt of direction from OPNAV (N789H), AMTCS concepts are to be implemented and the new tools integrated into the daily training environment of all participating aviation activities and supporting elements. AMTCS will serve as the standard training system for aviation maintenance training within the Navy and Marine Corps, and is planned to supersede the existing Maintenance Training Improvement Program and Maintenance Training Management and Evaluation Program (MATMEP) programs.

2. Personnel Qualification Standards. NA

3. Other Onboard or In-Service Training Packages. Marine Corps onboard training is based on the current series of MCO P4790.12, Individual Training Standards System (ITSS) and MATMEP. This program is designed to meet Marine Corps, as well as Navy OPNAVINST 4790.2 series, maintenance training requirements. It is a performance-based, standardized, level-progressive, documentable, training management and evaluation program. It identifies and prioritizes task inventories by MOS through a front-end analysis process that identifies task, skill, and knowledge requirements of each MOS. Currently the MATCALS ITSS/MATMEP instruction is being reviewed, although there are no changes expected for MATCALS and ASPARCS maintenance requirements. Updates to this NTSP will include any decisions concerning Marine Corps in-service training.

J. LOGISTICS SUPPORT

1. Manufacturer and Contract Numbers

CONTRACT NUMBER	MANUFACTURER	ADDRESS
N0019-00-C-0340	Lockheed Martin Corporation Naval Electronics and Surveillance Systems	6417 Deere Road Syracuse, NY 13206

CONTRACT NUMBER	MANUFACTURER	ADDRESS
NA	NAWCAD Patuxent River, Special Communications Requirements Division	Villa Road St. Inigoes, MD 20684

2. Program Documentation. The ORD, AAS 48.1, was updated in June 2000. The SRD, NAVAIR/213-99-0001, was updated in April 2000. The MATCALS NTSP, N88-NTSP-A-50-9804/A, was updated in July 2000.

3. Technical Data Plan. The contractor will provide and update, as required, Technical Manuals per the Technical Manual Contract Requirements for COTS, Technical Manual Contract Requirements for NDI, and the Technical Manual Contract Requirements for Military Specifications. The ASPARCS technical manuals contract will include training, operation, maintenance, support equipment, and repair instructions with illustrated parts breakdown.

4. Test Sets, Tools, and Test Equipment. ASPARCS tools and test equipment will be selected from Marine Corps common tools and general purpose test equipment listed in the current editions of General Purpose Electronic Test Equipment, where possible. Special Purpose Electronic Test Equipment or Special Tools, if required for maintenance of the system at the organizational level, will be provided as part of the system and be supported by the contractor. NATTC Pensacola will require pre-faulted training modules capable of simulating at least 40 different faults.

5. Repair Parts. The Government will require the contractor to maintain the form, fit, and functional equivalency of all Lowest Replaceable Units and modules throughout the 20-year ASPARCS life cycle. Elements of the supply support program are defined in the Integrated Support Plan (ISP). The contractor will provide a PBL program and function as the Government commercial stocking point. The ASPARCS Material Support Date (MSD) is scheduled for FY04.

6. Human Systems Integration. The ASPARCS Human Systems Integration program will achieve the effective integration of personnel into the design of the system. The human engineering effort will include, but not necessarily be limited to active participation in the following three major interrelated areas of system development: analysis, design and test, and evaluation. The use of NDI, COTS, and GOTS hardware, software, and firmware common to other systems should not require new personnel specialties, but rather an extension of the skill levels. Further, the use of highly reliable, integrated common support systems should result in the more efficient use of operating and support personnel.

K. SCHEDULES. Initial Operational Capability (IOC) for ASPARCS will be achieved after Phase I ATC core capability. ASPARCS is delivered to an operational unit and fielded with its required support equipment, training support, publications, and trained personnel in place. IOC

for ASPARCS is scheduled for FY04. ASPARCS Full Operational Capability (FOC) is scheduled for FY09. NATTC Pensacola Ready For Training (RFT) is scheduled for FY07.

1. Installation and Delivery Schedules. Currently, an ASPARCS delivery schedule for specific activities does not exist. A total of 12 ASPARCS deliveries are contracted. The first article will be delivered to the ISEA at St. Inigoes Maryland. ASPARCS delivery quantities by FY are as follows:

YEAR	FY03	FY04	FY05	FY06	FY07	FY08	FY09
DELIVERIES	1	2	2	2	2	2	1

The following chart is not an ASPARCS delivery schedule. The activities indicated below are projected to receive the ASPARCS.

EAST COAST	OVERSEAS
MACS-2, ATC Det A, Beaufort	MACS-4, ATC Det A, Futenma
MACS-2, ATC Det B, New River	MACS-4, ATC Det B, Iwakuni
MACS-2, ATC Det C, Bogue Field	**RESERVE**
WEST COAST	MACS-24, ATC Det A, JRB Fort Worth
MACS-1, ATC Det B, Miramar	**OTHER**
MACS-1, ATC Det C, Yuma	NATTC Pensacola
MACS-1, ATC Det A, Camp Pendleton	NAWCAD Patuxent River

2. Ready For Operational Use Schedule. ASPARCS will be Ready For Operational Use upon receipt, setup, and operational check out of the ASR, PAR, CS, and OS equipment at each MATCD.

3. Time Required to Install at Operational Sites. The time required to install ASPARCS at MATCDs will be minimal since it is replacing equipment already in use with a direct replacement item. The time required to install ASPARCS at NATTC Pensacola is unknown. This information will be provided in updates to this ASPARCS NTSP.

4. Foreign Military Sales and Other Source Delivery Schedule. No FMS of the ASPARCS systems are planned at this time.

5. Training Device and Technical Training Equipment Delivery Schedule. Currently, ASPARCS TD and TTE have not been identified. NATTC Pensacola is scheduled to be RFT in FY07. ASPARCS TD and TTE information will be included in future iterations of this NTSP. NATTC Pensacola will require pre-faulted training modules capable of simulating at least 40 different faults.

L. GOVERNMENT-FURNISHED EQUIPMENT AND CONTRACTOR-FURNISHED EQUIPMENT TRAINING REQUIREMENTS. NA

M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS

DOCUMENT OR NTSP TITLE	DOCUMENT OR NTSP NUMBER	PDA CODE	STATUS
MATCALS NTSP	N88-NTSP-A-50-9804/D	PMA2134	Approved Jul 00
ORD for ASPARCS	AAS 48.1 Change 2	PMA213	Approved Jun 00
SRD for ASPARCS	NAVAIR/213-99-0001	PMA213	Approved Apr 00
Statement Of Objectives (SOO) for ASPARCS	ASPARCS SOO	PMA213	Approved Feb 00
CAC2S Mission Need Statement	AAS 48	PMA213	Approved Apr 95
ASPARCS ISP	NA	PMA213	Approved
Direct Vendor Delivery Statement of Work (SOW) for ASPARCS	N00019-99-R-1384	PMA213	Approved Feb 00
ASPARCS ALSP	ATC-ALSP-23-05	PMA213	Approved Apr 00

PART II - BILLET AND PERSONNEL REQUIREMENTS

The following elements are not affected by the ASPARCS program and, therefore, are not included in Part II of this NTSP:

II.A. Billet Requirements

II.A.2.a. Operational and Fleet Support Activity Deactivation Schedule

II.A.2.b. Billets to be Deleted in Operational and Fleet Support Activities

II.A.2.c. Total Billets to be Deleted in Operational and Fleet Support Activities

Note: In an efforts to alleviate the confusion that ASPARCS will replace MATCALS, billets addressed in this NTSP reflect detachment requirements as they apply to ASPARCS components only. Each Air Traffic Control Detachment receiving ASPARCS components is identified. MATCALS support personnel with MOS 1142, 1161, 1169, and 1341 will receive no formal ASPARCS component training and will perform limited preventive and corrective maintenance of ASPARCS components via OJT. Support personnel with MOS 6492 will receive no formal ASPARCS component training and will perform calibration of ASPARCS components via OJT. Personnel with MOS 5952, NAVAIDS Technician, are not included as ASPARCS requirements since NAVAIDS components are not being replaced by ASPARCS components. A complete list of MATCALS activities, billets, and student throughput can be found in the MATCALS NTSP, N88-NTSP-A-50-9804/A, July 2000.

II.A. BILLET REQUIREMENTS

II.A.1.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY ACTIVATION SCHEDULE

SOURCE: Extract from Table of Manpower Requirements, TFS, MCCDC **DATE:** 1September 2001

ACTIVITY, UIC		PFYs	CFY02	FY03	FY04	FY05	FY06
FLEET SUPPORT ACTIVITIES - USMC							
MACS-2, ATC Det Alpha, Beaufort	09468	1	0	0	0	0	0
MACS-2, ATC Det Bravo, New River	09469	1	0	0	0	0	0
MACS-2, ATC Det Charlie, Bogue Field	53980	1	0	0	0	0	0
MACS-24, Det Alpha, JRB Fort Worth	55175	1	0	0	0	0	0
MACS-1, ATC Det Alpha, Camp Pendleton	67720	1	0	0	0	0	0
MACS-1, ATC Det Bravo, Miramar	67721	1	0	0	0	0	0
MACS-1, ATC Det Charlie, Yuma	67722	1	0	0	0	0	0
MACS-4, ATC Det Alpha, Futenma	00862	1	0	0	0	0	0
MACS-4, ATC Det Bravo, Iwakuni	09249	1	0	0	0	0	0
TOTAL:		9	0	0	0	0	0

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
FLEET SUPPORT ACTIVITIES - USMC					
MACS-2, ATC Det Alpha, Beaufort, 09468					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	3	0	LT	7220	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	3	GYSGT	7257	
	0	4	LCPL	5953	
	0	5	LCPL	5954	
	0	2	LCPL	7257	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	1	SGT	7257	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	4	SSGT	7257	
ACTIVITY TOTAL:	5	60			
MACS-2, ATC Det Bravo, New River, 09469					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	3	0	LT	7220	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	3	GYSGT	7257	
	0	4	LCPL	5953	
	0	5	LCPL	5954	
	0	2	LCPL	7257	
	0	7	LCPL	7257	7252

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	1	SGT	7257	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	4	SSGT	7257	
ACTIVITY TOTAL:	5	60			
MACS-2, ATC Det Charlie, Bogue Field, 53980					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	3	0	LT	7220	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	3	GYSGT	7257	
	0	4	LCPL	5953	
	0	5	LCPL	5954	
	0	2	LCPL	7257	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	1	SGT	7257	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	4	SSGT	7257	
ACTIVITY TOTAL:	5	60			
MACS-24, Det Alpha, JRB Fort Worth, 55175					
USMC	1	0	LT	7220	
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	0	1	GYSGT	7257	
	0	1	LCPL	5954	
	0	1	MSGT	5959	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	1	SGT	7257	7252
	0	1	SSGT	5953	
	0	1	SSGT	7257	
SMCR	1	0	CAPT	7220	
	1	0	CWO2	5950	
	2	0	LT	7220	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	2	GYSGT	7257	
	0	4	LCPL	5953	
	0	4	LCPL	5954	
	0	2	LCPL	7257	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	7291	
	0	1	SGT	7257	
	0	1	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5954	
	0	3	SSGT	7257	
ACTIVITY TOTAL:	5	60			
MACS-1, ATC Det Alpha, Camp Pendleton, 67720					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	3	0	LT	7220	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	3	GYSGT	7257	
	0	4	LCPL	5953	
	0	5	LCPL	5954	
	0	2	LCPL	7257	
	0	7	LCPL	7257	7252

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	1	SGT	7257	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	4	SSGT	7257	
ACTIVITY TOTAL:	5	60			
MACS-1, ATC Det Bravo, Miramar, 67721					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	3	0	LT	7220	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	3	GYSGT	7257	
	0	4	LCPL	5953	
	0	5	LCPL	5954	
	0	2	LCPL	7257	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	1	SGT	7257	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	4	SSGT	7257	
ACTIVITY TOTAL:	5	60			
MACS-1, ATC Det Charlie, Yuma, 67722					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	3	0	LT	7220	

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	3	GYSGT	7257	
	0	4	LCPL	5953	
	0	5	LCPL	5954	
	0	2	LCPL	7257	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	1	SGT	7257	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	4	SSGT	7257	
ACTIVITY TOTAL:	5	60			
MACS-4, ATC Det Alpha, Futenma, 00862					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	3	0	LT	7220	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	3	GYSGT	7257	
	0	4	LCPL	5953	
	0	5	LCPL	5954	
	0	2	LCPL	7257	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	1	SGT	7257	

II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

ACTIVITY, UIC, PHASING INCREMENT	BILLETS OFF	BILLETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
USMC	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	4	SSGT	7257	
ACTIVITY TOTAL:	5	60			
MACS-4, ATC Det Bravo, Iwakuni, 09249					
USMC	1	0	CAPT	7220	
	1	0	CWO2	5950	
	3	0	LT	7220	
	0	2	CPL	5953	
	0	2	CPL	5954	
	0	2	CPL	7257	
	0	2	CPL	7257	7252
	0	2	CPL	7257	7254
	0	1	GYSGT	5953	
	0	1	GYSGT	5954	
	0	3	GYSGT	7257	
	0	4	LCPL	5953	
	0	5	LCPL	5954	
	0	2	LCPL	7257	
	0	7	LCPL	7257	7252
	0	11	LCPL	7257	7253
	0	1	MSGT	5959	
	0	1	MSGT	7291	
	0	1	SGT	5953	
	0	1	SGT	5954	
	0	1	SGT	7257	
	0	2	SGT	7257	7252
	0	3	SGT	7257	7254
	0	1	SSGT	5953	
	0	1	SSGT	5954	
	0	4	SSGT	7257	
ACTIVITY TOTAL:	5	60			

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

DESIG/ RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF	PFYs ENL	CFY02 OFF	CFY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL	FY05 OFF	FY05 ENL	FY06 OFF	FY06 ENL
USMC FLEET SUPPORT ACTIVITIES - USMC													
CAPT	7220	8		0		0		0		0		0	
CWO2	5950	8		0		0		0		0		0	
LT	7220	25		0		0		0		0		0	
CPL	5953		16		0		0		0		0		0
CPL	5954		16		0		0		0		0		0
CPL	7257		16		0		0		0		0		0
CPL	7257 7252		16		0		0		0		0		0
CPL	7257 7254		16		0		0		0		0		0
GYSGT	5953		9		0		0		0		0		0
GYSGT	5954		9		0		0		0		0		0
GYSGT	7257		25		0		0		0		0		0
LCPL	5953		32		0		0		0		0		0
LCPL	5954		41		0		0		0		0		0
LCPL	7257		16		0		0		0		0		0
LCPL	7257 7252		56		0		0		0		0		0
LCPL	7257 7253		88		0		0		0		0		0
MSGT	5959		9		0		0		0		0		0
MSGT	7291		8		0		0		0		0		0
SGT	5953		9		0		0		0		0		0
SGT	5954		9		0		0		0		0		0
SGT	7257		8		0		0		0		0		0
SGT	7257 7252		17		0		0		0		0		0
SGT	7257 7254		24		0		0		0		0		0
SSGT	5953		9		0		0		0		0		0
SSGT	5954		8		0		0		0		0		0
SSGT	7257		33		0		0		0		0		0
USMC FLEET SUPPORT ACTIVITIES - SMCR													
CAPT	7220	1		0		0		0		0		0	
CWO2	5950	1		0		0		0		0		0	
LT	7220	2		0		0		0		0		0	
CPL	5953		2		0		0		0		0		0
CPL	5954		2		0		0		0		0		0
CPL	7257		2		0		0		0		0		0
CPL	7257 7252		2		0		0		0		0		0
CPL	7257 7254		2		0		0		0		0		0
GYSGT	7257		2		0		0		0		0		0
LCPL	5953		4		0		0		0		0		0
LCPL	5954		4		0		0		0		0		0
LCPL	7257		2		0		0		0		0		0
LCPL	7257 7252		7		0		0		0		0		0
LCPL	7257 7253		11		0		0		0		0		0
MSGT	7291		1		0		0		0		0		0
SGT	7257		1		0		0		0		0		0
SGT	7257 7252		1		0		0		0		0		0

II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

DESIG/ RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF	PFYs ENL	CFY02 OFF	CFY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL	FY05 OFF	FY05 ENL	FY06 OFF	FY06 ENL
SGT	7257 7254		3		0		0		0		0		0
SSGT	5954		1		0		0		0		0		0
SSGT	7257		3		0		0		0		0		0

SUMMARY TOTALS:

USMC FLEET SUPPORT ACTIVITIES - USMC												
41	490	0	0	0	0	0	0	0	0	0	0	0
USMC FLEET SUPPORT ACTIVITIES - SMCR												
4	50	0	0	0	0	0	0	0	0	0	0	0

GRAND TOTALS:

USMC - USMC												
41	490	0	0	0	0	0	0	0	0	0	0	0
USMC - SMCR												
4	50	0	0	0	0	0	0	0	0	0	0	0

II.A.3. TRAINING ACTIVITIES INSTRUCTOR AND SUPPORT BILLET REQUIREMENTS

DESIG RATING	PNEC/SNEC PMOS/SMOS		PFYs OFF	PFYs ENL	CFY02 OFF	CFY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL	FY05 OFF	FY05 ENL	FY06 OFF	FY06 ENL
TRAINING ACTIVITY, LOCATION, UIC: Marine Aviation Training Support Group, Pensacola, N63093														
INSTRUCTOR BILLETS														
USMC														
CPL	5953		0	4	0	4	0	4	0	4	0	4	0	4
GYSGT	5953		0	1	0	1	0	1	0	1	0	1	0	1
GYSGT	5954		0	1	0	1	0	1	0	1	0	1	0	1
GYSGT	7257		0	5	0	5	0	5	0	5	0	5	0	5
MGYSGT	5959		0	1	0	1	0	1	0	1	0	1	0	1
MSGT	5959		0	3	0	3	0	3	0	3	0	3	0	3
MSGT	7291		0	1	0	1	0	1	0	1	0	1	0	1
SGT	5953		0	7	0	7	0	7	0	7	0	7	0	7
SGT	5954		0	5	0	5	0	5	0	5	0	5	0	5
SGT	7257	7252	0	2	0	2	0	2	0	2	0	2	0	2
SGT	7257	7253	0	5	0	5	0	5	0	5	0	5	0	5
SSGT	5953		0	4	0	4	0	4	0	4	0	4	0	4
SSGT	5954		0	5	0	5	0	5	0	5	0	5	0	5
SSGT	7257		0	11	0	11	0	11	0	11	0	11	0	11
SUPPORT BILLETS														
USMC														
CAPT	7220		1	0	1	0	1	0	1	0	1	0	1	0
CPL	5953		0	1	0	1	0	1	0	1	0	1	0	1
CPL	5954		0	1	0	1	0	1	0	1	0	1	0	1
CWO5	5950		1	0	1	0	1	0	1	0	1	0	1	0
LCPL	5953		0	4	0	4	0	4	0	4	0	4	0	4
LCPL	5954		0	1	0	1	0	1	0	1	0	1	0	1
MSGT	5959		0	1	0	1	0	1	0	1	0	1	0	1
SSGT	5953		0	1	0	1	0	1	0	1	0	1	0	1
SSGT	5954		0	1	0	1	0	1	0	1	0	1	0	1
TOTAL:			2	65	2	65	2	65	2	65	2	65	2	65

II.A.4. CHARGEABLE STUDENT BILLET REQUIREMENTS

ACTIVITY, LOCATION, UIC	USN/ USMC	PFYs OFF	PFYs ENL	CFY02 OFF	CFY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL	FY05 OFF	FY05 ENL	FY06 OFF	FY06 ENL
Marine Aviation Training Support Group, Pensacola, N63093													
	USMC	2.0	36.6	2.0	36.6	2.0	36.6	2.0	36.6	2.0	36.6	2.0	36.6
SUMMARY TOTALS:													
	USMC	2.0	36.6	2.0	36.6	2.0	36.6	2.0	36.6	2.0	36.6	2.0	36.6
GRAND TOTALS:													
		2.0	36.6	2.0	36.6	2.0	36.6	2.0	36.6	2.0	36.6	2.0	36.6

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY02 +/-	CFY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM	FY05 +/-	FY05 CUM	FY06 +/-	FY06 CUM
a. OFFICER - USN	Not Applicable												
b. ENLISTED - USN	Not Applicable												
c. OFFICER - USMC													
Fleet Support Billets USMC and AR													
CAPT	7220		8	0	8	0	8	0	8	0	8	0	8
CWO2	5950		8	0	8	0	8	0	8	0	8	0	8
LT	7220		25	0	25	0	25	0	25	0	25	0	25
Staff Billets USMC and AR													
CAPT	7220		1	0	1	0	1	0	1	0	1	0	1
CWO5	5950		1	0	1	0	1	0	1	0	1	0	1
Chargeable Student Billets USMC and AR													
			2	0	2	0	2	0	2	0	2	0	2
SMCR Billets													
CAPT	7220		1	0	1	0	1	0	1	0	1	0	1
CWO2	5950		1	0	1	0	1	0	1	0	1	0	1
LT	7220		2	0	2	0	2	0	2	0	2	0	2
TOTAL USMC OFFICER BILLETS:													
Fleet Support			41	0	41	0	41	0	41	0	41	0	41
Staff			2	0	2	0	2	0	2	0	2	0	2
Chargeable Student			2	0	2	0	2	0	2	0	2	0	2
SMCR			4	0	4	0	4	0	4	0	4	0	4
d. ENLISTED - USMC													
Fleet Support Billets USMC and AR													
CPL	5953		16	0	16	0	16	0	16	0	16	0	16
CPL	5954		16	0	16	0	16	0	16	0	16	0	16

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY02 +/-	CFY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM	FY05 +/-	FY05 CUM	FY06 +/-	FY06 CUM
CPL	7257		16	0	16	0	16	0	16	0	16	0	16
CPL	7257	7252	16	0	16	0	16	0	16	0	16	0	16
CPL	7257	7254	16	0	16	0	16	0	16	0	16	0	16
GYSGT	5953		9	0	9	0	9	0	9	0	9	0	9
GYSGT	5954		9	0	9	0	9	0	9	0	9	0	9
GYSGT	7257		25	0	25	0	25	0	25	0	25	0	25
LCPL	5953		32	0	32	0	32	0	32	0	32	0	32
LCPL	5954		41	0	41	0	41	0	41	0	41	0	41
LCPL	7257		16	0	16	0	16	0	16	0	16	0	16
LCPL	7257	7252	56	0	56	0	56	0	56	0	56	0	56
LCPL	7257	7253	88	0	88	0	88	0	88	0	88	0	88
MSGT	5959		9	0	9	0	9	0	9	0	9	0	9
MSGT	7291		8	0	8	0	8	0	8	0	8	0	8
SGT	5953		9	0	9	0	9	0	9	0	9	0	9
SGT	5954		9	0	9	0	9	0	9	0	9	0	9
SGT	7257		8	0	8	0	8	0	8	0	8	0	8
SGT	7257	7252	17	0	17	0	17	0	17	0	17	0	17
SGT	7257	7254	24	0	24	0	24	0	24	0	24	0	24
SSGT	5953		9	0	9	0	9	0	9	0	9	0	9
SSGT	5954		8	0	8	0	8	0	8	0	8	0	8
SSGT	7257		33	0	33	0	33	0	33	0	33	0	33
Staff Billets USMC and AR													
CPL	5953		5	0	5	0	5	0	5	0	5	0	5
CPL	5954		1	0	1	0	1	0	1	0	1	0	1
GYSGT	5953		1	0	1	0	1	0	1	0	1	0	1
GYSGT	5954		1	0	1	0	1	0	1	0	1	0	1
GYSGT	7257		5	0	5	0	5	0	5	0	5	0	5
LCPL	5953		4	0	4	0	4	0	4	0	4	0	4
LCPL	5954		1	0	1	0	1	0	1	0	1	0	1
MGYSGT	5959		1	0	1	0	1	0	1	0	1	0	1
MSGT	5959		4	0	4	0	4	0	4	0	4	0	4
MSGT	7291		1	0	1	0	1	0	1	0	1	0	1
SGT	5953		7	0	7	0	7	0	7	0	7	0	7
SGT	5954		5	0	5	0	5	0	5	0	5	0	5
SGT	7257	7252	2	0	2	0	2	0	2	0	2	0	2
SGT	7257	7253	5	0	5	0	5	0	5	0	5	0	5
SSGT	5953		5	0	5	0	5	0	5	0	5	0	5
SSGT	5954		6	0	6	0	6	0	6	0	6	0	6
SSGT	7257		11	0	11	0	11	0	11	0	11	0	11
Chargeable Student Billets USMC and AR													
			37	0	37	0	37	0	37	0	37	0	37
SMCR Billets													
CPL	5953		2	0	2	0	2	0	2	0	2	0	2
CPL	5954		2	0	2	0	2	0	2	0	2	0	2
CPL	7257		2	0	2	0	2	0	2	0	2	0	2

II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY02 +/-	CFY02 CUM	FY03 +/-	FY03 CUM	FY04 +/-	FY04 CUM	FY05 +/-	FY05 CUM	FY06 +/-	FY06 CUM
CPL	7257	7252	2	0	2	0	2	0	2	0	2	0	2
CPL	7257	7254	2	0	2	0	2	0	2	0	2	0	2
GYSGT	7257		2	0	2	0	2	0	2	0	2	0	2
LCPL	5953		4	0	4	0	4	0	4	0	4	0	4
LCPL	5954		4	0	4	0	4	0	4	0	4	0	4
LCPL	7257		2	0	2	0	2	0	2	0	2	0	2
LCPL	7257	7252	7	0	7	0	7	0	7	0	7	0	7
LCPL	7257	7253	11	0	11	0	11	0	11	0	11	0	11
MSGT	7291		1	0	1	0	1	0	1	0	1	0	1
SGT	7257		1	0	1	0	1	0	1	0	1	0	1
SGT	7257	7252	1	0	1	0	1	0	1	0	1	0	1
SGT	7257	7254	3	0	3	0	3	0	3	0	3	0	3
SSGT	5954		1	0	1	0	1	0	1	0	1	0	1
SSGT	7257		3	0	3	0	3	0	3	0	3	0	3
TOTAL USMC ENLISTED BILLETS:													
Fleet Support			490	0	490	0	490	0	490	0	490	0	490
Staff			65	0	65	0	65	0	65	0	65	0	65
Chargeable Student			37	0	37	0	37	0	37	0	37	0	37
SMCR			50	0	50	0	50	0	50	0	50	0	50

II.B. PERSONNEL REQUIREMENTS

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

CIN, COURSE TITLE: C-2G-2018, MATCALS Advanced Operator Course
COURSE LENGTH: 4.0 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.08

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
Marine Aviation Training Support Group, Pensacola												
	USMC	USMC	11	87	11	87	11	87	11	87	11	87
		SMCR	0	4	1	4	0	4	1	4	0	4
		TOTAL:	11	91	12	91	11	91	12	91	11	91

CIN, COURSE TITLE: C-222-2021, MATCALS Operator
COURSE LENGTH: 1.0 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.00

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
Marine Aviation Training Support Group, Pensacola												
	USMC	USMC		87		87		87		87		87
		SMCR		4		4		4		4		4
		TOTAL:		91		91		91		91		91

CIN, COURSE TITLE: C-103-2110, MATCALS Maintenance Management and System Analysis Pipeline
COURSE LENGTH: 5.8 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.12

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
Marine Aviation Training Support Group, Pensacola												
	USMC	USMC	11	16	11	16	11	16	11	16	11	16
		SMCR	0	0	1	0	0	0	1	0	0	0
		TOTAL:	11	16	12	16	11	16	12	16	11	16

CIN, COURSE TITLE: C-103-2080, MATC Radar Technician Pipeline
COURSE LENGTH: 35.4 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.71

TRAINING		ACDU/TAR	CFY02		FY03		FY04		FY05		FY06	
ACTIVITY	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
Marine Aviation Training Support Group, Pensacola												
	USMC	USMC		24		24		24		24		24
		SMCR		1		1		1		1		1
		TOTAL:		25		25		25		25		25

II.B.1. ANNUAL TRAINING INPUT REQUIREMENTS

CIN, COURSE TITLE: C-103-2090, MATC Communications Technician Pipeline
COURSE LENGTH: 24.8 Weeks
ATTRITION FACTOR: USMC: 0% **BACKOUT FACTOR:** 0.50

TRAINING ACTIVITY	SOURCE	ACDU/TAR SELRES	CFY02 OFF	CFY02 ENL	FY03 OFF	FY03 ENL	FY04 OFF	FY04 ENL	FY05 OFF	FY05 ENL	FY06 OFF	FY06 ENL
Marine Aviation Training Support Group, Pensacola												
	USMC	USMC		24		24		24		24		24
		SMCR		1		1		1		1		1
		TOTAL:		25		25		25		25		25

PART III - TRAINING REQUIREMENTS

The following elements are not affected by the ASPARCS program and, therefore, are not included in Part III of this NTSP:

III.A.2. Follow-on Training

III.A.2.b. Planned Courses

III.A.2.c. Unique Courses

III.A.3. Existing Training Phased Out

Note: In an effort to alleviate the confusion that ASPARCS would replace MATCALS, training requirements addressed in this NTSP reflect requirements as they apply to ASPARCS components only. Throughput was calculated only on students requiring ASPARCS training attending course segments of the specified training tracks receiving ASPARCS components.

III.A.1. INITIAL TRAINING REQUIREMENTS

COURSE TITLE: ASPARCS Initial Maintainer Training
COURSE DEVELOPER: Lockheed Martin Corporation
COURSE INSTRUCTOR: Lockheed Martin Corporation
COURSE LENGTH: 14 Days
ACTIVITY DESTINATIONS: Patuxent River

LOCATION, UIC	BEGIN DATE	STUDENTS OFF	ENL	CIV	
NAWCAD Patuxent River, 00421	Feb 02	2	7	1	Input
		0.1	0.3		AOB
		0	0		Chargeable

COURSE TITLE: ASPARCS Initial Operator Training
COURSE DEVELOPER: Lockheed Martin Corporation
COURSE INSTRUCTOR: Lockheed Martin Corporation
COURSE LENGTH: 14 Days
ACTIVITY DESTINATIONS: Patuxent River

LOCATION, UIC	BEGIN DATE	STUDENTS OFF	ENL	CIV	
NAWCAD Patuxent River, 00421	Feb 02	2	7	1	Input
		0.1	0.3		AOB
		0	0		Chargeable

III.A.2. FOLLOW-ON TRAINING

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: C-2G-2018, MATCALS Advanced Operator Course
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

SOURCE: USMC **STUDENT CATEGORY:** USMC - AR

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
11	87	11	87	11	87	11	87	11	87	ATIR
11	87	11	87	11	87	11	87	11	87	Output
0.8	6.2	0.8	6.2	0.8	6.2	0.8	6.2	0.8	6.2	AOB
0.8	6.2	0.8	6.2	0.8	6.2	0.8	6.2	0.8	6.2	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	4	1	4	0	4	1	4	0	4	ATIR
0	4	1	4	0	4	1	4	0	4	Output
0.0	0.3	0.1	0.3	0.0	0.3	0.1	0.3	0.0	0.3	AOB
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Chargeable

CIN, COURSE TITLE: C-222-2021, MATCALS Operator
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

SOURCE: USMC **STUDENT CATEGORY:** USMC - AR

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	87		87		87		87		87	ATIR
	87		87		87		87		87	Output
	1.2		1.2		1.2		1.2		1.2	AOB
	1.2		1.2		1.2		1.2		1.2	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	4		4		4		4		4	ATIR
	4		4		4		4		4	Output
	0.1		0.1		0.1		0.1		0.1	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: C-103-2110, MATCALS Maintenance Management and System Analysis Pipeline
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

SOURCE: USMC **STUDENT CATEGORY:** USMC - AR

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
11	16	11	16	11	16	11	16	11	16	ATIR
11	16	11	16	11	16	11	16	11	16	Output
1.2	1.7	1.2	1.7	1.2	1.7	1.2	1.7	1.2	1.7	AOB
1.2	1.7	1.2	1.7	1.2	1.7	1.2	1.7	1.2	1.7	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
0	0	1	0	0	0	1	0	0	0	ATIR
0	0	1	0	0	0	1	0	0	0	Output
0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	AOB
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Chargeable

CIN, COURSE TITLE: C-103-2080, MATC Radar Technician Pipeline
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

SOURCE: USMC **STUDENT CATEGORY:** USMC - AR

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	24		24		24		24		24	ATIR
	24		24		24		24		24	Output
	16.2		16.2		16.2		16.2		16.2	AOB
	16.2		16.2		16.2		16.2		16.2	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	1		1		1		1		1	ATIR
	1		1		1		1		1	Output
	0.7		0.7		0.7		0.7		0.7	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: C-103-2090, MATC Communications Technician Pipeline
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

SOURCE: USMC **STUDENT CATEGORY:** USMC - AR

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	24		24		24		24		24	ATIR
	24		24		24		24		24	Output
	11.3		11.3		11.3		11.3		11.3	AOB
	11.3		11.3		11.3		11.3		11.3	Chargeable

SOURCE: USMC **STUDENT CATEGORY:** SMCR

CFY02		FY03		FY04		FY05		FY06		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	1		1		1		1		1	ATIR
	1		1		1		1		1	Output
	0.5		0.5		0.5		0.5		0.5	AOB
	0.0		0.0		0.0		0.0		0.0	Chargeable

PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

The following elements are not affected by the ASPARCS program and, therefore, are not included in Part IV of this NTSP:

IV.A. Training Hardware

IV.A.2. Training Devices

IV.B. Courseware Requirements

IV.B.1. Training Services

IV.C. Facility Requirements

IV.C.1. Facility Requirements Summary (Space/Support) by Activity

IV.C.2. Facility Requirements Detailed by Activity and Course

IV.C.3. Facility Project Summary by Program

Note: In an effort to alleviate the confusion that ASPARCS would replace MATCALS, training logistic support requirements addressed in this NTSP reflect course requirements as they apply to ASPARCS components only. Only course segments of the specified training tracks receiving ASPARCS components and requiring ASPARCS related equipment, curricula, and materials are identified.

PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS

IV.A. TRAINING HARDWARE

IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

CIN, COURSE TITLE: C-103-20XX, ASPARCS PAR Maintenance (Part of Track C-103-2080)
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
0000	ASPARCS Technical Training Equipment	TBD	FY07	CFE	Pending

CIN, COURSE TITLE: C-103-20XX, ASPARCS ASR Maintenance (Part of Track C-103-2080)
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
0000	ASPARCS Technical Training Equipment	TBD	FY07	CFE	Pending

CIN, COURSE TITLE: C-103-20XX, ASPARCS OS/CS Maintenance (Part of Track C-103-2090)
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
0000	ASPARCS Technical Training Equipment	TBD	FY07	CFE	Pending

CIN, COURSE TITLE: C-222-2021, MATCALS Operator
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
0000	ASPARCS Technical Training Equipment	TBD	FY07	CFE	Pending

IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

CIN, COURSE TITLE: C-2G-2018, MATCALS Advanced Operator Course
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

ITEM NO.	EQUIPMENT / TYPE OR RANGE OF REPAIR PARTS	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
0000	ASPARCS Technical Training Equipment	TBD	FY07	CFE	Pending

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: C-103-20XX, ASPARCS PAR Maintenance (Part of Track C-103-2080)
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
ASPARCS Instructor Guides	4	FY07	Pending
ASPARCS Multimedia	1 Set	FY07	Pending
ASPARCS Student Achievement Tests	10	FY07	Pending
ASPARCS Student Guides	10	FY07	Pending
ASPARCS Wall Charts	1 Set	FY07	Pending

CIN, COURSE TITLE: C-103-20XX, ASPARCS ASR Maintenance (Part of Track C-103-2080)
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
ASPARCS Instructor Guides	4	FY07	Pending
ASPARCS Multimedia	1 Set	FY07	Pending
ASPARCS Student Achievement Tests	10	FY07	Pending
ASPARCS Student Guides	10	FY07	Pending
ASPARCS Wall Charts	1 Set	FY07	Pending

CIN, COURSE TITLE: C-103-20XX, ASPARCS OS/CS Maintenance (Part of Track C-103-2090)
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
ASPARCS Instructor Guides	4	FY07	Pending
ASPARCS Multimedia	1 Set	FY07	Pending
ASPARCS Student Achievement Tests	10	FY07	Pending
ASPARCS Student Guides	10	FY07	Pending
ASPARCS Wall Charts	1 Set	FY07	Pending

CIN, COURSE TITLE: C-103-2111, MATCALS Maintenance Management (Part of Track C-103-2110)
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
ASPARCS Instructor Guides	4	FY07	Pending
ASPARCS Multimedia	1 Set	FY07	Pending
ASPARCS Student Achievement Tests	10	FY07	Pending
ASPARCS Student Guides	10	FY07	Pending
ASPARCS Wall Charts	1 Set	FY07	Pending
Computer: Current Processing Standards for Navy and Marine Corps	4 each	Mar 94	Onboard

IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: C-103-2112, MATCALS System Analysis (Part of Track C-103-2110)
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
ASPARCS Instructor Guides	4	FY07	Pending
ASPARCS Multimedia	1 Set	FY07	Pending
ASPARCS Student Achievement Tests	10	FY07	Pending
ASPARCS Student Guides	10	FY07	Pending
ASPARCS Wall Charts	1 Set	FY07	Pending

CIN, COURSE TITLE: C-222-2021, MATCALS Operator
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
ASPARCS Wall Charts	1 Set	FY07	Pending
ASPARCS Instructor Guides	4	FY07	Pending
ASPARCS Multimedia	1 Set	FY07	Pending
ASPARCS Student Achievement Tests	10	FY07	Pending
ASPARCS Student Guides	10	FY07	Pending

CIN, COURSE TITLE: C-2G-2018, MATCALS Advanced Operator Course
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC: Pensacola, N63093

TYPES OF MATERIAL OR AID	QTY REQD	DATE REQD	STATUS
ASPARCS Instructor Guides	4	FY07	Pending
ASPARCS Multimedia	1 Set	FY07	Pending
ASPARCS Student Achievement Tests	10	FY07	Pending
ASPARCS Student Guides	10	FY07	Pending
ASPARCS Wall Charts	1 Set	FY07	Pending

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-103-20XX, ASPARCS PAR Maintenance (Part of Track C-103-2080)
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC : Pensacola, N63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
APARCS Technical Manual, Number TBD	Hard copy	TBD	FY07	Pending

CIN, COURSE TITLE: C-103-20XX, ASPARCS ASR Maintenance (Part of Track C-103-2080)
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC : Pensacola, N63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
APARCS Technical Manual, Number TBD	Hard copy	8	FY07	Pending

CIN, COURSE TITLE: C-103-20XX, ASPARCS OS/CS Maintenance (Part of Track C-103-2090)
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC : Pensacola, N63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
APARCS Technical Manual, Number TBD	Hard copy	8	FY07	Pending

CIN, COURSE TITLE: C-103-2111, MATCALS Maintenance Management (Part of Track C-103-2110)
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC : Pensacola, N63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
APARCS Technical Manual, Number TBD	Hard copy	8	FY07	Pending

CIN, COURSE TITLE: C-103-2112, MATCALS System Analysis (Part of Track C-103-2110)
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC : Pensacola, N63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
APARCS Technical Manual, Number TBD	Hard copy	8	FY07	Pending

CIN, COURSE TITLE: C-222-2021, MATCALS Operator
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC : Pensacola, N63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
APARCS Technical Manual, Number TBD	Hard copy	8	FY07	Pending

IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-2G-2018, MATCALS Advanced Operator Course
TRAINING ACTIVITY: Marine Aviation Training Support Group
LOCATION, UIC : Pensacola, N63093

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
APARCS Technical Manual, Number TBD	Hard copy	8	FY07	Pending

PART V - MPT MILESTONES

COG CODE	MPT MILESTONES	DATE	STATUS
PDA	Validated the Requirement (CAC2S MNS AAS 48) for an ATC Capability to Control Aircraft	Apr 95	Completed
PDA	Developed ASPARCS Basic SRD	Nov 99	Completed
PDA	Approved ASPARCS DVD/SOO and SOW	Feb 00	Completed
PDA	Updated ASPARCS SRD	Apr 00	Completed
PDA	Developed Draft ASPARCS ISP	Jun 00	Completed
PDA	Updated ASPARCS ORD	Jun 00	Completed
PDA	Awarded ASPARCS Contract to Lockheed Martin Corporation	Jul 00	Completed
OPO	Developed ASPARCS Initial NTSP	Dec 00	Completed
OPO	Developed ASPARCS Draft NTSP	May 01	Completed
PDA	Conducted ASPARCS NTSP Conference	Nov 01	Completed
PDA	Developed ASPARCS Proposed NTSP	Jan 02	Completed
OPO	Approve ASPARCS NTSP	Mar 02	Pending
TSA	Deliver ASPARCS ATC Curriculum (to be performed by contractor/ISEA)	FY02	Pending
OPTEVFOR	Begin ASPARCS DT at Patuxent River (to be performed by NAWCAD)	FY03	Pending
OPTEVFOR	Begin ASPARCS OT at Bouge Field (to be performed by Marine Corps Test and Evaluation Activity)	FY03	Pending
PDA	Achieve ASPARCS IOC	FY04	Pending
PDA	Achieve ASPARCS MSD	FY04	Pending
PDA	Begin ASPARCS Fleet Delivery	FY04	Pending
TSA	Achieve ASPARCS RFT at NATTC Pensacola MATSG	FY07	Pending
PDA	Deliver ASPARCS to NATTC Pensacola MATSG (to be performed by ISEA)	FY07	Pending
TSA	Deliver ASPARCS TD and TTE to NATTC Pensacola (to be performed by ISEA)	FY07	Pending
PDA	Achieve ASPARCS FOC	FY09	Pending

PART VI - DECISION ITEMS / ACTION REQUIRED

DECISION ITEM OR ACTION REQUIRED	COMMAND ACTION	DUE DATE	STATUS
No Actions and/or Decisions required.			

PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL	TELEPHONE NUMBERS
CAPT Owen Fletcher Deputy Aviation Maintenance Programs CNO, N781B fletcher.owen@hq.navy.mil	**COMM:** (703) 604-7747 **DSN:** 664-7747 **FAX:** (703) 604-6972
CDR Mike Thompson Program Sponsor, Airspace and Air Traffic Control CNO, N785F thompson.mike@hq.navy.mil	**COMM:** (703) 604-7711 **DSN:** 664-7711 **FAX:** (703) 604-6969
LTCOL James Beaton, USMC Marine ATC / EAF Coordinator CNO, N785F3 james.beaton@hq.navy.mil	**COMM:** (703) 604-7707 **DSN:** 664-7707 **FAX:** (703) 604-6969
CAPT Terry Merritt Head, Aviation Technical Training Branch CNO, N789H merritt.terry@hq.navy.mil	**COMM:** (703) 604-7730 **DSN:** 664-7730 **FAX:** (703) 604-6939
AZCS Gary Greenlee NTSP Manager CNO, N789H7 greenlee.gary@hq.navy.mil	**COMM:** (703) 604-7709 **DSN:** 664-7709 **FAX:** (703) 604-6939
CDR Kevin Neary Aviation Manpower CNO, N122C1 n122c1@bupers.navy.mil	**COMM:** (703) 695-3247 **DSN:** 225-3247 **FAX:** (703) 614-5308
Mr. Robert Zweibel Training Technology Policy CNO, N795B zweilbel.robert@hq.navy.mil	**COMM:** (703) 602-5151 **DSN:** 332-5151 **FAX:** (703) 602-5175
COL David Barraclough, USMC Branch Head, USMC Aviation Manpower Management CMC, ASM-1 barracloughdl@hqmc.usmc.mil	**COMM:** (703) 614-1244 **DSN:** 224-1244 **FAX:** (703) 614-1309
LTCOL Angela Clingman, USMC USMC Aircraft Maintenance Officer CMC, ASL-33 clingmanab@hqmc.usmc.mil	**COMM:** (703) 614-1187 **DSN:** 224-1187 **FAX:** (703) 697-7343
MAJ Rodney D. Burnett, USMC Marine Corps Program Sponsor, ATC Coordinator CMC, APC-5 burnettrd@notes.hqi.usmc.mil	**COMM:** (703) 614-1850 **DSN:** 224-1850 **FAX:** (703) 614-2680

PART VII - POINTS OF CONTACT

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL	TELEPHONE NUMBERS
CAPT James L. Campbell Program Manager, Air Traffic Control and Landing Systems NAVAIRSYSCOM, PMA213 campbelljl@navair.navy.mil	**COMM:** (301) 995-6301 **DSN:** 342-3512 ext. 6301 **FAX:** (301) 995-6328
Mr. Brian Storey Assistant Deputy Program Manager NAVAIRSYSCOM, PMA2134 storeybj@navair.navy.mil	**COMM:** (301) 995-6314 **DSN:** 342-3512 ext. 6314 **FAX:** (301) 995-6328
CWO5 John Rego, USMC Marine Corps Project Officer/Liaison NAVAIRSYSCOM, PMA213M regojp@navair.navy.mil	**COMM:** (301) 995-6217 **DSN:** 342-3512 ext. 6217 **FAX:** (301) 995-6328
ACCM Mike Holder Assistant Program Manager, Training Systems NAVAIRSYSCOM, PMA2053B1 holderma@navair.navy.mil	**COMM:** (301) 757-8126 **DSN:** 757-8126 **FAX:** (301) 757-6945
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SUMMARY OF COMMENTS

ON THE

AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM

DRAFT NAVY TRAINING SYSTEM PLAN

OF MAY 2001

N88-NTSP-A-50-0006/D

Prepared by: ATC Aubrey Taylor, AIR 3.4.1
Contact at: (301) 757-3108
Date submitted: 8 December 2002

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

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COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

ACTIVITY NAME: Naval Air Systems Command, PMA2134

COMMENT: General

This Navy Training System Plan (NTSP) addresses only the introduction of the Air Surveillance and Precision Approach Radar Control System (ASPARCS). It does not address training for the other Marine Air Traffic Control And Landing Systems (MATCALS) programs. Since the technicians maintain a variety of the subsystems, it would seem proper to address the entire MATCALS program rather than just ASPARCS. For example, the Communications Technicians will be required to maintain the AN/TSQ-120, AN/TSQ-216, man-pack radios, and the Communications Subsystem of ASPARCS. It is unclear if the entire Communications Technician pipeline is addressed in the draft NTSP or only the ASPARCS portion.

INCORPORATED: NO

REMARKS: The intent of this NTSP is to address the requirements of the ASPARCS components as they relate to MATCALS. MATCALS has an Approved NTSP, N88-NTSP-A-50-9804/A dated July 2000 that covers the MATCALS program. It is planned that as the ASPARCS Program progresses further in the acquisition process, it will be included in updates to the MATCALS NTSP.

COMMENT: General

Radar Technicians reporting to the Fleet will be required to maintain the AN/TSQ-73, AN/TPN-22, and the ASPARCS radars until complete fielding of the ASPARCS is accomplished. The ratio of ASPARCS to legacy MATCALS maintainers is not addressed in the NTSP. Depending on the final plan to either cross-train ASPARCS and legacy MATCALS maintainers or include both ASPARCS and legacy systems in the training pipeline, this may be a major deficiency.

INCORPORATED: NO

REMARKS: Manning is now addressed as ASPARCS component maintainer requirements within the detachments, not the maintainer requirements for all components within MATCALS.

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Global

The term "MATCALS" meaning only the AN/TPS-73, AN/TPN-22 and AN/TSQ-131 is used throughout the plan and should be replaced with the specific equipment being addressed to eliminate confusion. MATCALS is a program and budget name.

INCORPORATED: YES

REMARKS: Reference to ASPARCS replacing MATCALS reworded.

COMMENT: Page i, second paragraph, first sentence

The ASPARCS…to replace the current Marine Air Traffic Control and Landing System (MATCALS)." This could lead the reader to believe that ASPARCS training will replace all other training conducted for MATCALS. Recommend that the specific equipment being replaced be identified.

INCORPORATED: YES

REMARKS: None

COMMENT: Page i, fifth paragraph, second sentence

Will require a temporary increase to the schoolhouse T/O while both MATCALS and ASPARCS are taught during the transition. Should be expanded to address additional space requirements at the schoolhouse during the transition unless some of the current radars and Control and Communications Subsystems are to be removed.

INCORPORATED: NO

REMARKS: In discussions at the ASPARCS conference of 14 November 2001, ASPARCS components will be installed in two separate evolutions beginning in FY07.

COMMENT: Page I-2, paragraph E, first sentence

Delete the words and OT. OT will be conducted by the Marine Corps Operational Test and Evaluation Agency.

INCORPORATED: YES

REMARKS: None

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page I-3, paragraph G.1.a, second sentence

The goal of the ASPARCS is to achieve greater mobility and transportability to support modern warfighting rather than enhancing detection, identification, tracking, and reporting capability.

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-6, paragraph 4

Should the logistics support vehicle, required to carry ancillary equipment, be addressed here?

INCORPORATED: NO

REMARKS: In discussions at the ASPARCS conference of 14 November 2001, the logistics support vehicle will not be addressed.

COMMENT: Page I-7, paragraph H.1

Add the words "within the parameters defined in the ORD/SRD". The size of the Amphibious Area of Operations may exceed the range of the ASR and certain weather conditions may exceed the operational limits of the system.

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-7, paragraph H.2, second sentence

There is no "ASPARCS Office of the Chief of Naval Operations. OPNAVINST 4790.XX will address all MATCALS maintenance.

INCORPORATED: YES

REMARKS: Statement reworded to prevent confusion.

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page I-8, first table

The ATC Maintenance Officer (MOS 5950) and the ATC Maintenance Chief (MOS 5959) are responsible for all equipment and systems in the ATC Detachment, not just the ASPARCS as stated on page I-7.

INCORPORATED: YES

REMARKS: Changed ASPARCS to MATCALS.

COMMENT: Page I-10, paragraph 4

The phase-out of training for the AN/TPS-73, AN/TPN-22, and AN/TSQ-131 should be further addressed as to time periods, Annual Training Input Requirements, and instructor manning. The phase-in of ASPARCS should be similarly addressed.

INCORPORATED: NO

REMARKS: Initially ASPARCS component training was to be phased-in at NATTC Pensacola, while at the same time continuing MATCALS component training. This would have created a requirement for additional training measures and instructor manning. In discussions at the ASPARCS conference of 14 November 2001, a decision was made to install ASPARCS components in two separate evolutions beginning in FY07, allowing half the resources to be dedicated to ASPARCS component training and half to MATCALS component training until the MATCALS components were phased out. This alleviated the requirement to teach additional MATCALS courses and the need for additional instructor manning.

COMMENT: Page I-12, paragraph 4.b(1), last sentence

All MATCALS training will not transition to ASPARCS equipment.

INCORPORATED: YES

REMARKS: Verbiage corrected.

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page I-14, paragraph 4.b(2), entire paragraph

> After completion of prerequisite courses, trainees attend one of the three MATCALS pipelines: Communications Technician, Radar Technician, and NAVAIDS Technician. The MATCALS Maintenance Management and System Analysis course is not a pipeline but rather advanced follow-on training for senior enlisted from any of the three pipelines.

INCORPORATED: NO

REMARKS: NAVAIDS is not addressed since it does not apply to ASPARCS. MATCALS Maintenance Management and System Analysis is a pipeline consisting of two segment courses.

COMMENT: Page I-16, TTE/TD

> Communications Technicians will also be trained on radios other than those found in the ASPARCS.

INCORPORATED: NO

REMARKS: The intent of this NTSP is to address the requirements of the ASPARCS components as they relate to MATCALS.

COMMENT: Page I-19, paragraph 1

> Include the Special Communications Requirements Division, NAWCAD as the manufacturer of the ASPARCS OS/CS.

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-20, last table

> MACS-1 and MACS-2 has been reduced to three ATC Detachments each. Add the two ATC Detachments located in Japan.

INCORPORATED: NO

REMARKS: In discussions at the ASPARCS conference of 14 November 2001, this comment was withdrawn.

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: General

A graphic representation of the pipelines showing course numbers and length would be helpful in this section.

INCORPORATED: NO

REMARKS: A graph was not included into the section; however, course lengths have been defined in the description of the pipeline.

COMMENT: Page II-1, Note

The ASPARCS delivery schedule is available.

INCORPORATED: NO

REMARKS: In discussions at the ASPARCS conference of 14 November 2001, this comment was withdrawn.

COMMENT: Page II-3

Billets Required for Operational and Fleet Support Activities: This appears to be the T/O for an entire ATC Detachment including all NAVAIDS and Communications Technicians. If this plan included all MATCALS subsystems this would be appropriate.

INCORPORATED: YES

REMARKS: Billets Required for Operational and Fleet Support Activities were recalculated to reflect ASPARCS requirements only.

COMMENT: Page II-5

Training Activities Instructor and Support Billet Requirements: This does not appear to show an increase in instructor billets as stated earlier in the plan. If the plan included all MATCALS equipment and subsystems, an overall increase in instructor billeting could be addressed in this section.

INCORPORATED: NO

REMARKS: Initially ASPARCS component training was to be phased-in at NATTC Pensacola, while at the same time continuing MATCALS component training. This would have created a requirement for additional training measures and instructor manning. In discussions at the ASPARCS conference of 14 November 2001, a decision was made to install ASPARCS components in two separate evolutions beginning in FY07, allowing half the resources to be dedicated to ASPARCS component training and half to MATCALS component training until the

MATCALS components were phased out. This alleviated the requirement to teach additional MATCALS courses and the need for additional instructor manning.

COMMENT: Page II-6

Chargeable Student Billet Requirements: Indicated a 50% reduction from FY04 to FY05. This would seem incorrect.

INCORPORATED: YES

REMARKS: Billets Required for Operational and Fleet Support Activities were recalculated to reflect ASPARCS requirements only.

COMMENT: Page II-8

Annual Incremental and Cumulative Billets: This table indicates an increase of 54 chargeable student billets and an increase of 530 fleet support billets. NAVAID technicians are included indicating that their pipeline is impacted by the introduction of ASPARCS.

INCORPORATED: YES

REMARKS: Billets Required for Operational and Fleet Support Activities were recalculated to reflect ASPARCS requirements only.

COMMENT: Page II-9

Annual Training Input Requirements (ATIR): This table indicates a reduction of all ATIRs in FY05 as compared to FY04.

INCORPORATED: YES

REMARKS: Billets Required for Operational and Fleet Support Activities were recalculated to reflect ASPARCS requirements only.

COMMENT: Part IV

Throughout this part, ASPARCS equipment, technical data, and curriculum is indicated as a requirement for courses that are not impacted by the introduction of ASPARCS (i.e., AN/TSQ-216 RLST, AN/TSQ-120 Tower, etc.).

INCORPORATED: YES

REMARKS: Requirements corrected to only those replaced by ASPARCS.

COMMENTS / RECOMMENDATIONS ON THE
AIR SURVEILLANCE AND PRECISION
APPROACH RADAR CONTROL SYSTEM
DRAFT NAVY TRAINING SYSTEM PLAN

ACTIVITY NAME: Naval Air Systems Command, PMA205-3B1

COMMENT: Global

ASPARCS does not replace MATCALS; it is replacing the current AN/TSQ-131, AN/TPS-73, AN/TPN-22, and their associated equipment of the MATCALS program. At a later date the ASPARCS NTSP will be incorporated into the MATCALS NTSP.

INCORPORATED: YES

REMARKS: Reference to ASPARCS replacing MATCALS reworded.

COMMENT: Page i, fifth paragraph, second sentence

Lists a temporary increase to the schoolhouse T/O. Is this temporary personnel increase listed in Part II of the NTSP? If not, it should be for further manning increase justification.

INCORPORATED: NO

REMARKS: Initially ASPARCS component training was to be phased-in at NATTC Pensacola, while at the same time continuing MATCALS component training. This would have created a requirement for additional training measures and instructor manning. In discussions at the ASPARCS conference of 14 November 2001, a decision was made to install ASPARCS components in two separate evolutions beginning in FY07, allowing half the resources to be dedicated to ASPARCS component training and half to MATCALS component training until the MATCALS components were phased out. This alleviated the requirement to teach additional MATCALS courses and the need for additional instructor manning.

COMMENT: Page I-2, paragraph D.2

Change first sentence to read “No Foreign Military Sales (FMS) of the ASPARCS system are planned at this time” and remove second sentence.

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-3, paragraph F

ASPARCS will not replace MATCALS.

INCORPORATED: YES

REMARKS: Reference to ASPARCS replacing MATCALS reworded.

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page I-3, paragraph G.1, second sentence

Reword to include the major goal of "increasing the mobility and transportability".

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-6, paragraph 3

Change title from "New Development Introduction" to "Development Introduction."

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-7, paragraph H.1, first sentence

The ASPARCS will be operated by MATCD personnel to provide ATC capabilities throughout an Amphibious Operational Area without regard to the effects of weather. Remove "without regard to the effects of weather"

INCORPORATED: NO

REMARKS: Comment previously worded per PMA213 suggestion.

COMMENT: Page I-7, paragraph H.2, third sentence

An ASPARCS Office of the Chief of Naval Operations Instruction (OPNAVINST) 4790.XX is currently being developed. Delete this sentence.

INCORPORATED: NO

REMARKS: Comment previously worded per PMA213 suggestion.

COMMENT: Page I-7, paragraph H.2, sixth sentence

The following Marine Corps personnel will provide ASPARCS ATC maintenance supervision, coordination, and administration: Change to: "MATCALS ATC maintenance supervision..."

INCORPORATED: YES

REMARKS: None

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page I-8, paragraph H.2.a

MOSs 1142, 1161,1169,1341, 6492 will still perform intermediate maintenance, only ATC maintenance personnel will perform "O to D" maintenance. Could not find MOS 8641 in MOS manual; is this number a misprint?

INCORPORATED: YES

REMARKS: In discussions at the ASPARCS conference of 14 November 2001, MOS 8641 was removed. Utility MOS personnel will perform very limited CM and PM.

COMMENT: Page I-9, paragraph H.3, last sentence

What is MOS 8641 or is it a misprint?

INCORPORATED: YES

REMARKS: In discussions at the ASPARCS conference of 14 November 2001, MOS 8641 was removed.

COMMENT: Page I-10, paragraph H.4, third sentence

ASPARCS training is not phasing out MATCALS.

INCORPORATED: YES

REMARKS: Corrected verbiage.

COMMENT: Page I-12, paragraph H.4.b.1, second subparagraph, last sentence

MATCALS training will not transition to ASPARCS.

INCORPORATED: YES

REMARKS: Deleted statement.

COMMENT: Page I-12, paragraph H.4.b.1, fourth subparagraph, last sentence

MATCALS training will not transition to ASPARCS.

INCORPORATED: YES

REMARKS: Corrected verbiage.

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page I-14, paragraph H.4.b.2, first subparagraph, last sentence

MATCALS training will not transition to ASPARCS.

INCORPORATED: YES

REMARKS: Deleted statement.

COMMENT: Page I-18, paragraph I.1.b

AMTCS information needs to be re-verified to see if it is still current

INCORPORATED: NA

REMARKS: AMTCS is planned to replace MATMEP. Currently no AMTCS information is available for the ASPARCS components. Information concerning ASPARCS AMTCS training will be included in future iterations of this NTSP as the AMTCS program matures. For information concerning AMTCS, contact NAVAIRSYSCOM, PMA205-3D3. For information concerning AMTCS as it applies to MATMEP contact MCCDC, Code C473.

COMMENT: Page I-18, paragraph I.3

ITSS and MATMEP information needs to be re-verified to see if it is still current.

INCORPORATED: NA

REMARKS: AMTCS is planned to replace MATMEP. Currently no AMTCS information is available for the ASPARCS components. Information concerning ASPARCS AMTCS training will be included in future iterations of this NTSP as the AMTCS program matures. For information concerning AMTCS, contact NAVAIRSYSCOM, PMA205-3D3. For information concerning AMTCS as it applies to MATMEP contact MCCDC, Code C473.

COMMENT: Page I-19, paragraph J.1

Manufacturer and Contract Numbers" add "Special Communications Requirements Division", address "NAWCAD St. Inigoes, Maryland." They are doing the 'CS' and part of the 'OS'

INCORPORATED: YES

REMARKS: None

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page I-19, paragraph J.4

Remove second sentence starting with "Either Metric or American…"

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-19, paragraph J.5

Remove reference to DVD, PBL remains. Also this section lists the "ISP". Do not believe that there is an approved "ISP"

INCORPORATED: YES

REMARKS: In discussions at the ASPARCS conference of 14 November 2001, comment concerning ISP is withdrawn.

COMMENT: Page I-20, paragraph K

Starting with first sentence, second spelling of ASPARCS acronym incorrect. Last sentence Pensacola RFT is TBD.

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-20, paragraph K.1, second sentence

"A total of 12 ASPARCS deliveries are contracted" delete rest of sentence. Add "The first article will be delivered to the ISEA at St. Inigoes, Maryland."

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-20, paragraph K.1

Delivery schedule table, "MACS-2, ATC Det. D, Bogue Field" change to "Det. C"

INCORPORATED: YES

REMARKS: None

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page I-21, paragraph K.2

Reword, "ASPARCS will be Ready For Operational Use upon receipt, setup, and operational check out of the ASR, PAR, CS, and OS equipment at each MATCD."

INCORPORATED: YES

REMARKS: None

COMMENT: Page II-1

Notes: Remove comment "At this time, a definitive ASPARCS delivery schedule is not available". Also, remove "The purpose of this Part II is to show the transition to ASPARCS."

INCORPORATED: YES

REMARKS: None

COMMENT: Page II-2

Pensacola will be receiving ASPARCS equipment, one in FY05 and one in FY07.

INCORPORATED: NO

REMARKS: In discussions at the ASPARCS conference of 14 November 2001, ASPARCS components will be installed in two separate evolutions beginning in FY07.

COMMENT: Page II-3

Since Marine Corps "Detachments" will be receiving the ASPARCS equipment and not Marine Corps "Air Stations," recommend listing the nine detachments and NATTC Pensacola separately from the Air Station personnel.

INCORPORATED: YES

REMARKS: None

COMMENT: Page II-5

The web 'PDF' version for this page was left blank. **NOTE:** Comments from page II-4 on, may be one page off from reviewers page, copy for Part II only.

INCORPORATED: NA

REMARKS: None

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page II-6, element II.A.3

Please clarify what this table is stating. Are these the number of billets authorized per year that will be needed to teach ASPARCS? If so, then should the number of personnel required be cumulative based on the date and number of ASPARCS equipment being installed as per Part I installation schedule? Example, half the billets in FY05 and the other half in FY07 when the second ASPARCS is received?

INCORPORATED: YES

REMARKS: Billets were recalculated to reflect ASPARCS requirements only.

COMMENT: Page II-7, element II.A.4

What is this table stating and what is it based on? "Chargeable Student Billet Requirements" per day, per year or what? Then, the same as the previous comment, is this based on the date and number of ASPARCS equipment that will be received at NATTC?

INCORPORATED: YES

REMARKS: Billets were recalculated to reflect ASPARCS requirements only. Chargeable Student Billet Requirements are per year.

COMMENT: Page II-9, element II.A.5

Again, what is this table stating? What is this based on? I understand that you just pull the information, but this information needs to be understood by all that are reading or reviewing this document.

INCORPORATED: YES

REMARKS: Billets were recalculated to reflect ASPARCS requirements only. Element II.A.5 shows Total Billets and all annual increases and decreases, plus Chargeable Student billets rounded to whole numbers.

COMMENT: Page II-10, element II.B

What are the numbers in FY04 and FY05 based on?

INCORPORATED: YES

REMARKS: Numbers are based on Detachment T/O information extracted from the Table of Manpower Requirements, TFS, MCCDC, dated September 1, 2001.

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page III-2, element III.A.1

Please re-verify the data contained in the "Initial Training Requirements," in particular "Course Length"

INCORPORATED: YES

REMARKS: Initial Training Requirements data reflects latest information provided by NAVAIRSYSCOM, PMA213, and NAWCAD St. Inigoes.

COMMENT: Page IV-1, Note

ASPARCS Training Devices have not been identified to date. Schoolhouse equipment will be actual fleet working equipment installed, but installed as Technical Training Equipment (TTE) at NATTC Pensacola.

INCORPORATED: YES

REMARKS: This statement was deleted.

COMMENT: Page IV-5, element IV.B.2

Where did this information come from and what is it telling me? If this table lists these items as to be delivered to the schoolhouse, this is not the case and this table needs to be corrected with whoever gave this information to begin with? The "MATC Technician Common Core C-103-2072 (Track C-103-2080)" and the "MATC Communications Technician Pipeline C-103-2090" will not be replaced by ASPARCS equipment. Instead, will probably be modified some time in the future.

INCORPORATED: YES

REMARKS: The requirements were corrected to those replaced by ASPARCS.

COMMENT: Page IV-6, element IV.B.2

The "MATC Technician Common Core C-103-2072 (Track C-103-2090), AN/TSQ-216 (C-103-2094) and the AN/TSQ-120 (C-103-2092) course will not be replaced by ASPARCS equipment.

INCORPORATED: YES

REMARKS: Requirements were corrected to those replaced by ASPARCS.

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page IV-7, element IV.B.2

Courses on this page will not be replaced by ASPARCS equipment, but will probably have to be modified to incorporate ASPARCS information.

INCORPORATED: YES

REMARKS: Requirements were corrected to those replaced by ASPARCS.

COMMENT: Page IV-8, element IV.B.3

CINs C-103-2072, C-103-2091, and C-103-2094 will not be replaced by ASPARCS equipment.

INCORPORATED: YES

REMARKS: Requirements were corrected to those replaced by ASPARCS.

COMMENT: Page IV-9, element IV.B.3

CINs C-103-2092, C-103-2111, C-103-2112, C-222-2021, C-2G-2018 courses will not be replaced by ASPARCS.

INCORPORATED: YES

REMARKS: Requirements were corrected to those replaced by ASPARCS.

COMMENT: Page V-1

"Begin ASPARCS DT at Patuxent River" will be performed by NAWCAD.

"Begin ASPARCS OT at Bouge Field" will be performed by Marine Corp Test and Evaluation.

"Deliver ASPARCS ATC Curriculum" and "Deliver NATTC Pensacola TD and TTE" will be performed by the contractor.

"Achieve ASPARCS RFT at NATTC Pensacola" will be performed by MATSG.

"Begin to Phase out MATCALS follow-on training at NATTC Pensacola" - ASPARCS will not phase out MATCALS but rather phase out subsystems.

INCORPORATED: YES

REMARKS: None

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page VII-1

Change "CDR Kelch" to "CDR Thompson"

INCORPORATED: YES

REMARKS: None

COMMENT: Page VII-2

Change Major Hathaway to CWO5 John Rego.

Change ACCM McGrath to "ACCM Mike A. Holder.

Change Mr. Hagen's title to "Assistant Deputy Program Manager, Logistics".

Change spelling Mr. Ben Fenhagan" to "Fenhagen" and his title to "Product Support Team Leader."

INCORPORATED: YES

REMARKS: None

COMMENT: Page VII-3

Remove "LCDR Lawson" and "AVCM Reed."

Change "CAPT Taylor" to "MAJ Taylor."

Change CWO4 Young's phone number to (850) 452-7027.

INCORPORATED: YES

REMARKS: None

COMMENT: Page VII-4

Remove "AVCM Claire"

INCORPORATED: YES

REMARKS: None

COMMENTS / RECOMMENDATIONS ON THE
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ACTIVITY NAME: Naval Air Technical Training Center Pensacola

COMMENT: General

Standardization of terms. What does MATCALS refer to? While drafting the OPNAV 4790 MATCALS Maintenance Program (MMP) we decided that "MATCALS Program" was a general term that applied to all Marine ATC equipment. It does not refer just to the AN/TPS-73, AN/TPN-22, and AN/TSQ-131, but to all Marine ATC systems. The MATCALS Program is the only program associated with Marine ATC.

INCORPORATED: YES

REMARKS: The applicable verbiage was clarified.

COMMENT: General

Is the ASPARCS Program replacing the MATCALS Program? Will the ASPARCS program supercede the MATCALS program when fully implemented? Will the MMP be changed to the AMP?

INCORPORATED: NA

REMARKS: ASPARCS will not replace MATCALS. The applicable verbiage was clarified.

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: General

Throughout this NTSP we refer to the ASPARCS Program as a replacement for the MATCALS Program. ASPARCS replaces three items: AN/TPS-73, AN/TPN-22, and AN/TSQ-131. All other systems under the MATCALS program umbrella remain the same.

INCORPORATED: YES

REMARKS: ASPARCS will not replace MATCALS. The applicable verbiage was clarified.

COMMENT: General

Let's call the items being replaced by ASPARCS "legacy systems." We can define the term "legacy systems" upfront in the NTSP so every one knows what we are talking about. Do not refer to ASPARCS as a program. This implies that it is replacing the MATCALS program, which it is not. Recommend contents of ASPARCS NTSP be incorporated into MATCALS NTSP and ASPARCS NTSP be abolished.

INCORPORATED: NO

REMARKS: In discussions at the ASPARCS conference of 14 November 2001, it was agreed that the term "legacy systems" would not be used.

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: General

Implementation of ASPARCS training at NATTC Pensacola. We have developed two Courses of Action (COA) to implement ASPARCS training at NATTC. The preferred COA for ease of transition at NATTC is COA 1.

COA 1

From FY04 to FY07, training will be provided to fleet personnel by the contractor/government as the detachments receive ASPARCS. Trained personnel in these detachments shall be stabilized until formal training is started at NATTC in FY07.

Training on legacy systems at NATTC will be shut down in FY07, all respective MATCALS legacy systems will be removed, and ASPARCS installed in their place. ASPARCS training will commence when the ASPARCS equipment is installed and curriculum delivered to NATTC.

If COA 1 is adopted, make changes as appropriate throughout the NTSP.

COA 2

In FY05 one suite of MATCALS legacy systems will be removed and replaced by one suite of ASPARCS. Training for ASPARCS will be phased into the current training pipelines after ASPARCS has been installed and curriculum delivered. NATTC will train half the respective student throughput on MATCALS and ASPARCS until FY07. In FY07, the remaining MATCALS suite will be replaced by ASPARCS and all students will be trained on ASPARCS.

If COA 2 is adopted, change all references to the beginning of ASPARCS training at NATTC, Pensacola, Florida, from FY04 to FY05.

INCORPORATED: NO

REMARKS: In discussions at the ASPARCS conference of 14 November 2001, ASPARCS components will be installed in two separate evolutions beginning in FY07.

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page i, fifth paragraph

Change to: ASPARCS operator and maintainer training will require development of new course material to merge into the existing training pipelines. The ASPARCS operator and maintainer training at Naval Air Technical Training Center, Pensacola, Florida, will require a temporary increase to the schoolhouse T/O while both MATCALS and ASPARCS are taught during the transition. The ASPARCS training program will consist of ASPARCS initial training for operator and maintainer personnel provided by the Lockheed Martin Corporation. Follow-on training will be conducted at Department of Defense facilities.

INCORPORATED: NO

REMARKS: In discussions at the ASPARCS conference of 14 November 2001, ASPARCS components will be installed in two separate evolutions beginning in FY07.

COMMENT: Page I-1, paragraph C

Training Agency, Training Support Agency, Manpower and Personnel Mission Sponsor.

DELETE: CINCLANTFLT (N721)

DELETE: CINCPACFLT (N70)

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-2, paragraph D.1, third subparagraph

Operation of the ASPARCS will be similar to the current Marine Air Traffic Control and Landing System (MATCALS) with improved maintainability." Why do we say this? In what way(s) are they similar? The two systems are vastly different in employment, operation, and maintenance concept. Operators have a much greater role in the setup and maintenance of ASPARCS than they did with MATCALS and maintenance will transition from intermediate to organizational. Leave the statement out or change to reflect a difference in the two systems.

INCORPORATED: YES

REMARKS: Statement deleted.

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COMMENT: Page I-3, paragraph F

The ASPARCS program will replace MATCALS, which is reaching its service life limits. The MATCALS is comprised of the AN/TSQ-131(V) Radar Command and Control Shelter, which is part of the Control and Communications Subsystem (CCS), the AN/TPS-73 Airport Surveillance Radar (ASR), and the AN/TPN-22 Precision Approach Radar (PAR) systems.

Change to: ASPARCS will replace the AN/TSQ-131(V) Radar Command and Control Shelter, the AN/TPS-73 Airport Surveillance Radar (ASR), and the AN/TPN-22 Precision Approach Radar (PAR) MATCALS systems, which are reaching their service life limits.

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-6, paragraph G.4

Add as first paragraph: ASPARCS and its related equipment uses fiber optics, standard telephone lines, electrical wiring, radio networks, and remote control signals to interface with its various components, aircraft, and other MACCS agencies.

INCORPORATED: YES

REMARKS: None

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page I-7, paragraph H.1

> **1. Operational Concept.** The ASPARCS will be operated by MATCD personnel to provide ATC capabilities throughout an Amphibious Operational Area without regard to the effects of weather. Two Marine Corps personnel are required to set up each subsystem to the basic operational mode level and to the full operational mode. The following Marine Corps personnel and Military Occupational Specialty (MOS) will operate the ASPARCS in the execution of the ATC missions:
>
> Change to:
>
> **1. Operational Concept.** The ASPARCS will be operated by MATCD personnel to provide ATC capabilities throughout an Amphibious Operational Area without regard to the effects of weather.
>
> **DELETE:** "Two Marine Corps personnel are required to set up each subsystem to the basic operational mode level and to the full operational mode. The following Marine Corps personnel and Military Occupational Specialty (MOS) will operate the ASPARCS in the execution of the ATC missions:" and the associated table.

INCORPORATED: NO

REMARKS: NTSP formatting requires the identification of MOSs associated with the operation of the subject systems.

COMMENT: Page I-8, paragraph H.2.a

> Minimal ASPARCS maintenance support will also provided by non-ATC Marine Corps personnel with MOSs 1142, 1161, 1169, 1341, 6492, or 8641.
>
> We are going to need more than **minimal** maintenance support from the 1142, 1161, 1169, and 1341s if we are to keep our ECUs and generators running. PME support (6492) is resident within the MALS.
>
> Change to:
>
> "Non-ATC Marine Corps personnel with MOSs 1142, 1161, 1169, and 1341 assigned to the MATCD to provide ASPARCS maintenance support. PME (6492) support is provided by the supporting IMA."

INCORPORATED: YES

REMARKS: None

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page I-8, paragraph H.2.a.1

> **Preventive Maintenance.** Marine Corps personnel with MOSs 5953 or 5954 perform Preventive Maintenance (PM) on ASPARCS equipment.
>
> Are the 5954s and 5953s going to perform PM on ECUs and generators?.
>
> Change to: "**Preventive Maintenance.** Marine Corps personnel with MOSs 5953, 5954, 1142, 1161, and 1341 will perform Preventive Maintenance (PM) on ASPARCS equipment."

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-8, paragraph H.2.a.2

> **Corrective Maintenance.** Marine Corps personnel with MOSs 5953 or 5954 will perform Corrective Maintenance (CM) on ASPARCS equipment. … CM will consist of diagnosing and isolating a malfunction to the faulty lowest replaceable unit, removing and replacing subassemblies and piece parts, performance of subassembly and subsystem adjustments and alignments as necessary, and verification that the malfunction has been corrected.
>
> Are the 5954s and 5953s going to perform CM on ECUs and generators?.
>
> Change to: "**Corrective Maintenance.** Marine Corps personnel with MOSs 5953, 5954, 1142, 1161, and 1341 will perform Corrective Maintenance (CM) on ASPARCS equipment. … CM will consist of diagnosing and isolating a malfunction to the faulty lowest replaceable unit, removing and replacing subassemblies and piece parts, repairing fiber optic cables, performance of subassembly and subsystem adjustments and alignments as necessary, and verification that the malfunction has been corrected."

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-8, paragraph H.2.c

> Depot level maintenance should address maintenance requirements on the Van/Shelter.

INCORPORATED: YES

REMARKS: None

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page I-9, paragraph H.2.e

Insert new sentence: The ASPARCS installed at NATTC, Pensacola, Florida, will be considered non-deployable and may be modified for instructional purposes.

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-9, paragraph H.3

Insert second sentence: Additional Marines will be required to support the MATC School T/O (8221) during the transition years to compensate for concurrent ASPARCS and MATCALS training paths.

INCORPORATED: NO

REMARKS: Initially ASPARCS component training was to be phased-in at NATTC Pensacola, while at the same time continuing MATCALS component training. This would have created a requirement for additional training measures and instructor manning. In discussions at the ASPARCS conference of 14 November 2001, a decision was made to install ASPARCS components in two separate evolutions beginning in FY07, allowing half the resources to be dedicated to ASPARCS component training and half to MATCALS component training until the MATCALS components were phased out. This alleviated the requirement to teach additional MATCALS courses and the need for additional instructor manning.

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page I-10, paragraph H.4

In FY04, ASPARCS training will begin to phase out the MATCALS ATC operator and maintainer training. ASPARCS operator and maintainer training will readily merge with existing training pipelines, with reduced or similar overall training times required.

ATC operator training will not readily merge with our current training pipelines. They will be new segments of those pipelines. They will add significantly to the length of training for both the Communications and Radar pipelines while we transition to all ASPARCS training.

Change to: "In FY05, ASPARCS training will begin to phase out MATCALS ATC operator and maintainer training. Initially, ASPARCS operator and maintainer training will be added as new segments to the Radar, Communications, and ATC Operator pipelines. Following the transition, time to train will be reduced by the amount of time required to train MATCALS."

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-10, paragraph H.4, third sentence

Change FY04 to FY05.

INCORPORATED: NO

REMARKS: FY05 has changed to FY07.

COMMENT: Page I-10, paragraph H.4, second subparagraph

Insert new second sentence: Concurrent maintenance training of MATCALS and ASPARCS during the transition will require a temporary increase to the NATTC Pensacola (MATSG) Table of Organization to adequately instruct both systems. The increase in the operator's course will cause an increase in the instructors required for the MATCALS Operators Course.

INCORPORATED: NO

REMARKS: Initially ASPARCS component training was to be phased-in at NATTC Pensacola, while at the same time continuing MATCALS component training. This would have created a requirement for additional training measures and instructor manning. In discussions at the ASPARCS conference of 14 November 2001, a decision was made to install ASPARCS components in two separate evolutions beginning in FY07, allowing half the resources to be dedicated to ASPARCS component training and half to MATCALS component training until the

MATCALS components were phased out. This alleviated the requirement to teach additional MATCALS courses and the need for additional instructor manning.

COMMENT: Page I-10, paragraph H.4, second subparagraph

The ASPARCS will be significantly different in electronic operation from MATCALS ASR, PAR, and CCS. This will require total rewrite of the existing maintenance courses to train 59XXs on ASPARCS. Curriculum development for the new courses needs to be included in the contract for development of ASPARCS, in accordance with Naval orders and directives regarding training format, for use in the maintenance schoolhouse.

INCORPORATED: NA

REMARKS: Per ASPARCS Action Chits NTSPC-003 and NTSPC-004 dated 15 November 2001, the Lockheed Martin Corporation and NAWCAD St. Inigoes will provided a complete integrated training package to NATTC Pensacola.

COMMENT: Page I-10, paragraph H.4.a

Add FY04 training of instructors at NATTC, Pensacola, Florida.

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-11, paragraph H.4.a

Table: ASPARCS Initial Operator Training

"This course will provide initial ASPARCS training for operators, instructors, FIT, DT, and OT personnel, including..."

Change to: "This course will provide initial ASPARCS training for maintainers, operators, instructors, FIT, DT, and OT personnel, including…"

INCORPORATED: NO

REMARKS: Maintainers will receive initial maintainer training.

COMMENT: Page I-11, paragraph H.4.a, table

Delete prerequisites listed as 5950, 5959, 5953, and 5954 and replace with 595X.

INCORPORATED: YES

REMARKS: None

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COMMENT: Page I-12, paragraph H.4.b.(1), second subparagraph

Change to: Upon successful completion of *C-222-2010, Air Traffic Controller A1*, Basic Air Traffic Controller Trainees (MOS 7251) receive instruction on the operation of MATCALS equipment (ASPARCS equipment in the future). Marine Corps Controllers attend this course in lieu of the Navy flight planning familiarization course at the end of the Air Traffic Controller Course. Course *C-222-2021, MATCALS Operator (Basic)* is five days in length and provides MATCD personnel with entry-level knowledge and skills needed to operate the MATCALS equipment. This knowledge will enable them to become familiar with MATCALS equipment and to perform basic Marine Air Traffic Control functions in a tactical environment. All MATCALS ATC training will transition to ASPARCS equipment, and this will permanently increase the length of this course.

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-12, paragraph H.4.b.(1), fourth subparagraph

Change to: Additional advanced training for senior MATCD personnel is available in *C-2G-2018, MATCALS Advanced Operator Course*, which provides comprehensive training on the deployment and operation of MATCALS. Students receive instruction on the operation, capabilities, and limitations of the MATCALS. Students are also instructed on developing and designing United States Standard Terminal Instrument Procedures. Students will perform tasks at an ATC Chief level in an expeditionary environment, during tactical conditions. The advanced operator course will transition to ASPARCS equipment. The following courses have been established specifically for MATCALS operator training, and will transition to ASPARCS operator training beginning in FY05.

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-13, paragraph H.4.b.(1)

MATCALS Advance Operator Course, description, Change MATCALS to ASPARCS.

INCORPORATED: NO

REMARKS: Incorporation of ASPARCS will not change the course title.

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COMMENT: Page I-14, paragraph H.4.b.(2)

MATCALS Maintenance Management and System Analyst Pipeline: Delete System Analysis from pipeline description.

INCORPORATED: NO

REMARKS: Per OATMS and CANTRAC, course title is correct.

COMMENT: Page I-15, paragraph H.4.b.(2)

MATCALS Maintenance Management and System Analyst Pipeline:

Prerequisites: Add MOS 5910, 5970, and 5993, delete: MOS 7220 and paygrades O-1 through 0-3

INCORPORATED: NO

REMARKS: Per CANTRAC, prerequisites are correct.

COMMENT: Page I-15, paragraph H.4.b.(2)

MATCALS Radar Technician Pipeline description: Pipeline will change when ASPARCS is implemented. New CINs will be added for ASPARCS equipment and old CINs will be phased out.

Length: Change 247 to TBD

INCORPORATED: YES

REMARKS: Changed to “estimated”.

COMMENT: Page I-16, paragraph H.4.b.(2)

MATCALS Communication Technician pipeline description: Pipeline will change when ASPARCS is implemented. New CINs will be added for ASPARCS equipment and old CINs will be phased out.

Length: Change 172 to TBD

INCORPORATED: YES

REMARKS: Changed to “estimated”.

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COMMENT: Page I-16, paragraph H.4.c

Change prerequisites MOS to 725X for first, leave 7254 for second, and change last to 595X.

INCORPORATED: YES

REMARKS: NO

COMMENT: Page I-17, paragraph H.4.d, second sentence

Change to: Eventually, legacy systems will be phased out.

INCORPORATED: NO

REMARKS: In discussions at the ASPARCS conference of 14 November 2001, reference to "legacy" systems is discouraged.

COMMENT: Page I-17, paragraph I.a.2, last sentence

ASPARCS will be incorporated into the MATCALS program.

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-17, paragraph I.a.3, first sentence

Change to: The ISEA is responsible for developing and providing TD and TEE for maintenance and operator training on MATCALS systems and equipment.

Add a new last sentence: "ASPARCS will be incorporated into the MATCALS program.

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-17, paragraph I.a.4

Change MATC to MATCALS.

INCORPORATED: YES

REMARKS: None

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page I-17, paragraph I.a.5

Change MATC to MATCALS.

Add a new last sentence: "ASPARCS will be incorporated into the MATCALS program."

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-18, paragraph I.b

Does AMTCS apply to the ASPARCS program? If not, delete all reference to it. If so, see comments that follow.

INCORPORATED: NA

REMARKS: AMTCS will replace MATMEP and will apply to the ASPARCS program. When specific information on AMTCS relating to ASPARCS and ITS becomes available, it will be included in updates to this document.

COMMENT: Page I-18, paragraph I.b, last subparagraph

AMTCS is to replace MTIP and MATMEP. How does this effect the Individual Training Standards (ITS) that ATC maintenance Marines developed and are to be signed off by TECOM? Who has cognizance over AMTCS and when will it be in use by the fleet? Will this duplicate our current and future efforts for formal/informal training and fleet training documentation?

INCORPORATED: NA

REMARKS: AMTCS will replace MATMEP and will apply to the ASPARCS program. When specific information on AMTCS relating to ASPARCS and ITS becomes available, it will be included in updates to this document.

COMMENT: Page I-18, paragraph I.3, subparagraph I.b

(Fifth) states that AMTCS will replace MATMEP and MTIP. Paragraph I.3. states that no replacement for MATMEP has been identified. Which is it?

INCORPORATED: NA

REMARKS: AMTCS will replace MATMEP.

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COMMENT: Page I-19, paragraph J.4

Add a sentence to indicate that the NATTC Pensacola will need pre-faulted modules to simulate at least 40 different problems.

INCORPORATED: YES

REMARKS: NO

COMMENT: Page I-19, paragraph J.5

This paragraph identifies DVD and PBL. Paragraph H.2.c also identifies PBL. These terms appear to mean the same thing. If they do, standardize the terminology.

INCORPORATED: NO

REMARKS: Reference to DVD has been deleted per previous comment.

COMMENT: Page I-20, paragraph K

Change ASPAR to ASPARCS. Last sentence change FY04 to FY05.

INCORPORATED: YES

REMARKS: None

COMMENT: Page I-20, paragraph K.1

1. Installation and Delivery Schedules. Currently, an ASPARCS delivery schedule for specific activities does not exist. A total of 12 ASPARCS deliveries are contracted; tentative plans indicate that NATTC Pensacola and MACS-2 Cherry Point will receive the first articles. ASPARCS delivery quantities by FY are as follows:"

NATTC's receipt of ASPARCS is dependent on the adopotion of COA 1 or COA 2.

"The following chart is not an ASPARCS delivery schedule. The activities indicated below are potential candidates to receive the ASPARCS."

Change to: "potential candidates" to "projected."

INCORPORATED: YES

REMARKS: None

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COMMENT: Page I-21, paragraph K.5

Change FY04 to FY05

Add a sentence to indicate that NATTC Pensacola will need pre-faulted modules capable of simulating at least 40 different problems.

INCORPORATED: YES

REMARKS: None

COMMENT: Page II-2, paragraph II.A.1.a

Change UIC from 39831 to N63093.

INCORPORATED: YES

REMARKS: None

COMMENT: Pages II-2, II-5, and II-6

Change all reference to NATTC Pensacola, Florida, UIC from 39831 to N63093

INCORPORATED: YES

REMARKS: None

COMMENT: Page II-5, paragraph II.A.3

Change UIC from 39831 to N63093

INCORPORATED: YES

REMARKS: None

COMMENT: Page II-5, element II.A.3

Add: **Support:** 1-5950 CWO4, 1-5902 Capt, 1-5959 MGySgt.

Move: 1-5959 MSgt from Support to Instructor.

INCORPORATED: NA

REMARKS: Billets were recalculated to reflect ASPARCS requirements only.

COMMENTS / RECOMMENDATIONS ON THE AIR SURVEILLANCE AND PRECISION APPROACH RADAR CONTROL SYSTEM DRAFT NAVY TRAINING SYSTEM PLAN

COMMENT: Page II-9, element II.B.1

From what source did the numbers on student throughput come?

INCORPORATED: NA

REMARKS: Billets were recalculated to reflect ASPARCS. Student throughput is based on fleet billet requirements using OPNAVINST 1500.76 algorithms.

COMMENT: Pages III-3 and III-4

Change all reference to NATTC Pensacola, Florida, UIC from 39831 to N63093.

INCORPORATED: YES

REMARKS: None

COMMENT: Page III-1

The following elements are not affected by the ASPARCS program and, therefore, are not included in Part III of this NTSP:

III.A.2. Follow-on Training

III.A.2.b. Planned Courses

III.A.2.c. Unique Courses

III.A.3. Existing Training Phased Out"

If there are no planned courses and the existing training is phased out, why do we need an NTSP?

INCORPORATED: NO

REMARKS: Existing courses, a third category, are included, i.e., existing pipeline courses are being modified.

COMMENT: Page III-2, element III.A.1

Increase number of enlisted training seats from 7 to 10 to accommodate a 5954, 5953, and 7200 from the school house.

INCORPORATED: NA

REMARKS: Billets were recalculated to reflect ASPARCS, thus generating a different throughput than originally shown.

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COMMENT: Page III-3, element III.A.2.a

Where did the throughput numbers come from? They seem grossly inaccurate.

INCORPORATED: NA

REMARKS: Billets were recalculated to reflect ASPARCS, thus generating a different throughput than originally shown.

COMMENT: Page IV-1

The following elements are not affected by the ASPARCS program and, therefore, are not included in Part IV of this NTSP:

IV.A. Training Hardware

IV.A.2. Training Devices

IV.B. Courseware Requirements

IV.B.1. Training Services

IV.C. Facility Requirements

IV.C.1. Facility Requirements Summary (Space/Support) by Activity

IV.C.2. Facility Requirements Detailed by Activity and Course

IV.C.3. Facility Project Summary by Program

Note: ASPARCS Training Devices have not been identified to date.

If the training devices haven't been identified, how can we state that any of the above is not required? At the very least, there will be some facilities modification required to accept whatever ASPARCS turns out to be.

INCORPORATED: NA

REMARKS: Requirements will be addressed in future iterations of this NTSP as the ASPARCS program matures.

COMMENT: Pages IV-2 through 9, elements IV.A and IV.B

Why are legacy CINs and Nomenclatures being used? All CINs and Nomenclatures need to change to reflect ASPARCS. Why is the RLST and the AN/TSQ-120 in this NTSP?

INCORPORATED: YES

REMARKS: Changed to reflect ASPARCS.

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COMMENT: Element IV.B.2

Curricula and Training Aids: Where the "Types of Materials or Aid" reads "slides/transparencies," it should globally be replaced with "multimedia." There should be no transparencies for ASPARCS, it should all be via "light cannon" with computer and this should be considered for resource requirements in the FY05 POM.

INCORPORATED: YES

REMARKS: None

COMMENT: Pages IV-8 through 9, element IV.B.3.

Change Quantity of Tech Manuals from 8 to 26. This will be enough for three classes of eight students onboard at a time, and a set for the Maintenance Section and TPL. Are we getting electronic TMs? If so, we need four copy of each electronic TM published.

INCORPORATED: NO

REMARKS: The quantity indicated is per class.

COMMENT: Page V-1

Change milestone dates for NATTC Pensacola, Florida.

INCORPORATED: YES

REMARKS: None

COMMENT: Page VII-3

Change MSGT Charles Clayton to MSGT Paul Harris.

E-mail: msgt-paul.k.harris@cnet.navy.mil

INCORPORATED: YES

REMARKS: None

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ACTIVITY NAME: MACS-1 ATC Detachment Bravo, MCAS Miramar

COMMENT: Element II.A.3

Training Activities Instructor and Support Billet Requirements: There is no mention of a Maintenance Officer and/or a LDO for the schoolhouse.

INCORPORATED: YES

REMARKS: Billets were recalculated to reflect ASPARCS requirements only.

COMMENT: Element II.A.1.C

Total Billets Required for Operational and Fleet Support Activities: Do these numbers include our reserve unit?

INCORPORATED: YES

REMARKS: MACS-24, ATC Detachment Alpha is included.